

THE BEST SELLING MAGAZINE FOR THE

# AMSTRAD PCW

# 8000 PLUS

8256 • 8512 • 9512

ISSUE 17 • FEBRUARY 1988 • £1.50

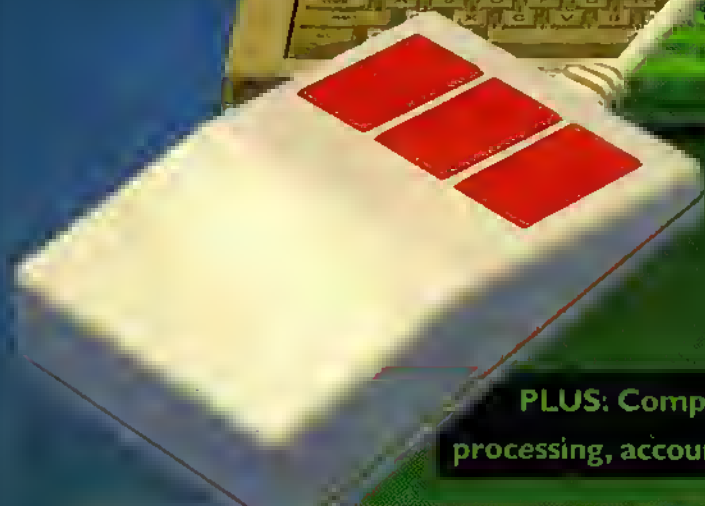
**MINI  
COMPETITION**

Ten copies of Mini  
Office Professional to be won



# Stop Press

Could AMS's new desktop publishing  
package be the best yet?



**PLUS:** Complete buyer's guide to word  
processing, accounts, utilities and DTP software

# MASTERFILE 8000

FOR ALL AMSTRAD PCW COMPUTERS

MASTERFILE 8000, the subject of so many enquiries, is now available.

MASTERFILE 8000 is a totally new database product. While drawing on the best features of the CPC versions, it has been designed specifically for the PCW range. The resulting combination of control and power is a delight to use.

Other products offer a choice between fast but limited-capacity RAM files, and large-capacity but cumbersome fixed-length, direct-access disc files. MASTERFILE 8000 and the PCW RAM disc combine to offer high capacity with fast access to variable-length data. File capacity is limited only by the size of your RAM disc.

A MASTERFILE hallmark is the provision of multiple, user-designed display formats. This flexibility remains, but now it's even easier. With MASTERFILE 8000 you design your formats "live"; no more questionnaires, just move your format effects around the screen using the cursor keys!

Record updating is even easier than before — just steer your cursor to any field on the screen and then insert/erase/alter as required.

Special options are provided for handling dates and surnames, and column totals can be generated.

All screen work is done graphically — and hence we offer unique panel, box, and ruled line options. Choose the line spacing at pixel resolution — you will be amazed how much clearer 9-pixel lines are than the usual 8-pixels. (Study the picture.) And all this faster than CP/M normally lets you paint the screen! PCW printer functions, under menu control, are provided.

Customer Details and Invoices

British United Freight  
433 Western Avenue  
Gloucester  
GL3 5JH

Tel: 0452 0111  
Contact: Mike M  
Ref: BUF

On Display Options:  
 Street using.....  
 Alter data.....  
 Erase data.....  
 Assign to set.....  
 Unit page.....  
 Next page.....  
 Find key 1 or 2.....  
 Go to record number.....  
 Print.....  
 Print slowly record.....  
 Leave menu.....  
 Show re-sequenced.....  
 Rotate format.....  
 Go to search.....  
 Exit to main menu.....  
 Cash with order

Invoice	Tax point	Amount	Date paid	Comments
12044	20 Aug 87	£835.00	02 Oct 87	
12299	28 Aug 87	£38.00	02 Oct 87	
12450	01 Oct 87	£395.00		
12453	21 Oct 87	£133.00		
12533	03 Nov 87	£1,444.50		
12538	10 Nov 87	£355.65		
12703	14 Nov 87	£206.00		
12702	11 Nov 87	£35.20		
12833	04 Dec 87	£803.55	04 Dec 87	
<b>Totals:</b>		<b>£3,253.90</b>		

Date of invoice

Search: Files:INVOICES Records:00017 Selected:00003 Key: Format:

Keyed files are maintained automatically in key sequence, with never any need to sort. You can have unkeyed files too, where records can be inserted at any point in the file.

Any file can make RELATIONAL references to up to EIGHT read-only keyed files, the linkage being effected purely by the use of matching file and data names.

You can import/merge ASCII files (e.g. from MASTERFILE III), or export any data (e.g. to a word-processor), and merge files. For keyed files this is a true merge, not just an append operation. By virtue of export and re-import you can make a copy of a file in another key sequence. New data fields can be added at any time.

File searches combine flexibility with speed. (MASTERFILE 8000 usually waits for you, not the other way around.) You can even assign subsets of a file into one or more of seven pigeon-holes for subsequent reference or further manipulation.

Megaglone Ltd

Sales Contact: Martin Roberts  
Telephone: 0255 554301  
Sales office: NCL  
Date of last order: 14 Aug 86  
Value to date: £21,455.00

Wage House  
143-145 London Road  
Chislehurst  
Essex CM12 3DG

Ref	Buyer	Model	Specification	Price ex VAT
C0001	System	7201	100cps 40000 120col	£231
C0002	System	7201	100cps 40000 120col	£231
C0003	System	7201	100cps 40000 120col	£231
C0004	System	7201	100cps 40000 120col	£231
C0005	System	7201	100cps 40000 120col	£231
C0006	System	7201	100cps 40000 120col	£231
C0007	System	7201	100cps 40000 120col	£231
C0008	System	7201	100cps 40000 120col	£231
C0009	System	7201	100cps 40000 120col	£231
C0010	System	7201	100cps 40000 120col	£231
C0011	System	7201	100cps 40000 120col	£231
C0012	System	7201	100cps 40000 120col	£231
C0013	System	7201	100cps 40000 120col	£231
C0014	System	7201	100cps 40000 120col	£231
C0015	System	7201	100cps 40000 120col	£231
C0016	System	7201	100cps 40000 120col	£231
C0017	System	7201	100cps 40000 120col	£231
C0018	System	7201	100cps 40000 120col	£231
C0019	System	7201	100cps 40000 120col	£231
C0020	System	7201	100cps 40000 120col	£231
C0021	System	7201	100cps 40000 120col	£231

FIELD-TO-FIELD CALCULATION is available, using any mixture of terms and arithmetic operators + - \* / ( ).

MASTERFILE 8000 is totally menu-driven, fully machine-coded, and comes with example files and a detailed manual. We claim (modestly) that you will not find another filing system with such power, flexibility, and friendliness.

MASTERFILE 8000 costs £49.95 including VAT and P&P to anywhere in Europe. Elsewhere please add 20% for air-mail service. ACCESS/VISA/MASTERCARD orders are welcome, written or telephoned, quoting card expiry date. Make cheques payable to "Campbell Systems".

Our normal response is return of post, 1st class.  
CAMPBELL SYSTEMS (Dept 8PL)  
7 Station Road, EPPING, Essex CM16 4HA,  
England. Tel: (0378) 77762/3

# OPENING MENU

## OPENING MENU

**AmazIng News**  
**StunningG Features**  
**kNockout Reviews**  
**InValuable Tips**  
**SiZzling Offers**

## 5 KEY WORDS

Miscellaneous musings from the Editor.

## 7 NEWS

1988 gathers pace – read all about it.

## 10 SPECIALIST SOFTWARE

Discover the world of bespoke software and turn your PCW into a Jack of all trades.

## 16 QUICKIES

New fonts for LocoScript 2 or CP/M, and a PCW to Z88 transfer kit.

## 18 DTP WITH STOP PRESS

The ultimate desktop publisher? Check out AMS's *Stop Press* with our searching review.



## 25 LOCOSCRIPT CHARACTERS

LocoScript now allows you to design your own characters.

## 28 CASE IN POINT

PCWs penetrate the depths of Africa.

## 31 WIN AN OFFICE!

Ten copies of Mini Office Professional to be won.

## 32 CP/M'S KEYBOARDS

Configure your keyboard to do what you want with SETKEYS.

## 36 JEEVES DESKTOP

Banish that A> prompt for good with Kempston's mouse.

## 39 BOOK REVIEWS

New looks at LocoScript 2 by Ian Sinclair and John Hughes.

## 43 HISTORY LESSON

How did computers all begin? A collection of curios for the curious.

## 47 GAMES

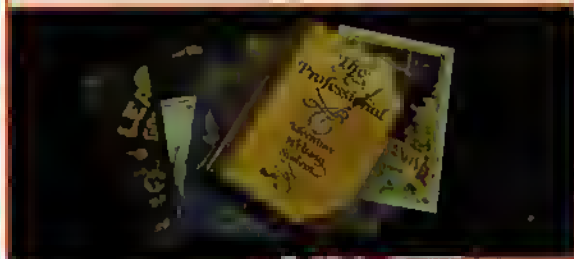
A journey through Level 9's *Knight Orc*.

## 49 WRITER'S VIEW

Can word processors can damage your writing?

## 51 DESIGN AN ADVENTURE

*Professional Adventure Writer* hands control over to you.



## 54 BEGINNING BASIC

A new series demystifying PCW programming.

## 57 LANGFORD'S PRINTOUT

SF author David Langford treads a few well-worn paths.

## 61 PUBLIC DOMAIN

Character designing for CP/M programs.

## 62 LISTINGS PLUS

A spreadsheet plus other goodies to type in.

## 69 TIP-OFFS

Three pages packed with life-saving hints and help.

## 74 THE GOOD SOFTWARE GUIDE

The complete guide to word processing, desktop publishing, accounts, payroll and utility programs.

## 80 SPECIAL OFFERS

Buy a little something on the cheap for your Valentine.

## 85 POSTSCRIPT

The best always comes last – your letters and opinions.

PUBLISHED BY  
FUTURE PUBLISHING LTD

EDITORIAL  
AD PRODUCTION

4 QUEEN STREET  
BATH • BA1 1EJ  
TEL • 0225 446034  
FAX • 0225 446019

Telecom Gold • 84:TXT152

SUBSCRIPTIONS  
SPECIAL OFFERS

THE OLD BARN  
SOMERTON  
SOMERSET • TA11 7PY  
TEL • 0458 74011

ADVERTISING SALES

TEL • 061-474 7333

### YOUR CONTACTS

EDITOR  
Ben Taylor

ASSISTANT EDITOR  
Alec Rae

TECHNICAL EDITOR  
Rob Ainsley

ADVERTISING MANAGER  
Margaret Clarke

AD PRODUCTION  
Jenny Evans  
Diane Taverner

ART EDITOR  
Kim Bale

SUBSCRIPTIONS  
Carrie-Anne Porter

PUBLISHER  
Chns Anderson

COVER PHOTOGRAPHY  
STUART BAYNES PHOTOGRAPHY  
BATH  
TEL • 0225 66343

COLOUR ORIENTATION  
WESSEX REPRODUCTIONS  
352A WELLS ROAD  
BRISTOL • BS4 0OL

PRINTING  
REDWOOD WEB OFFSET  
YEOMANS WAY  
TROWBRIDGE • WILTS

DISTRIBUTION  
SEYMOUR PRESS  
334 BRIXTON ROAD  
LONDON • SW9 7AG

© FUTURE PUBLISHING LTD 1988  
8000 Plus is an independent publication. The  
company who produce it – Future Publishing Ltd –  
have no link with Amstrad plc.

We welcome contributions from readers – please  
enclose a SAE with submissions if return of the  
material is required. Payment for accepted  
articles is made 4 weeks after publication date.  
We take great care to ensure that what we print is  
accurate, but we cannot accept liability for any  
mistakes or misprints. No part of this publication  
may be reproduced in any form without our  
permission.

**We needed even more space to show  
you all that's new in the  
Amstrad marketplace  
-so we've moved to ...**

**The Great Hall  
Alexandra Palace  
Wood Green, London**



# AMSTRAD COMPUTER SHOW

**Note  
new  
dates**

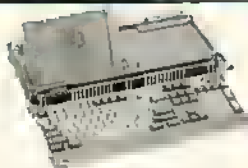
**10am - 6pm Thursday, February 4**

**10am - 6pm Friday, February 5**

**10am - 5pm Saturday, February 6**

**Note  
new  
dates**

**It's  
here!**



**This is YOUR chance to  
try out for yourself the  
new Amstrad portable  
- the machine the  
press is raving about!**

**FREE  
presentations in  
the Amstrad Theatre**

You can sit back in  
style and learn all about the  
latest releases for the Amstrad  
computers - and get expert  
advice from some of the best  
brains in the industry. What's  
more, there's lots more seats  
than ever to meet the high demand  
for this very popular attraction.

**This is YOUR chance to meet top people in  
the world of Amstrad. Among them will be  
experts from:**

Amstrad  
Advantage  
Amstrad User Club  
Amor  
Bosma Educational Software  
CDS Software  
Compact Software  
Computer Bookshops  
Connect Systems  
CPM  
Comaba  
Database Publications  
Dataphase  
Digital Research  
Direct Disk Supplies  
Electric Distributors CST  
Electro Music Research  
Equinox Computer Systems  
Evesham Micros  
Garwood  
Glentworth Publishing

Grales  
Gulfstream  
Radlow Computer Centre  
Headline Communications  
BSV Computer Services  
Janast  
IQ  
Kadot  
Kavin Computer Supplies  
KDS Electronics  
Kempston Data  
KKS Electronics  
Levianthas Micros  
MAP Computing  
Margin Maker  
Matrox  
Micro Avika  
MicroLink  
Micro Media Computer Supplies  
Microsoft  
Midas Mail Order

Mineva Systems  
MWD  
Nabholz Computing  
Pace Micro Technology  
Practical Software  
Polar  
R & AJ Preston  
Romantic Robot  
Rombo Productions  
Sagsoft  
Sandpiper Software  
Saxon Computing  
School Software  
Silicon Systems  
Sireo Software  
The Electric Studio  
Tinih  
Trybridge  
Twistler Computers  
Zonalour  
1512 Independents

Bring this coupon to the Show  
to get 50p per person off the  
normal admission price of  
£3 (adults), £2 (children).

**50p  
OFF**

**AMSTRAD  
COMPUTER  
SHOW**

**Thursday, February 4, 10am-6pm  
Friday, February 5, 10am-6pm  
Saturday, February 6, 10am-5pm**

**Alexandra Palace, London N22**

**How to get there: By British Rail to Alexandra Palace station  
(9 mins. from King's Cross), then FREE shuttle bus to the show.  
By road from junction 25 on the M25 (15 mins). Free parking.**

A266

## People in glass houses

The old jokes are always the best – ever since computer invoicing began there have been stories in the papers about people receiving uncompromising demands for nought pounds nought pence or else.

Locomotive Software have just very kindly sent us a complimentary subscription to their LocoScript newsletter, *Script*, and their automatic system followed up with the invoice shown. For sheer number of zeroes, it must win an award. Haven't the makers of LocoMail ever heard of testing for zero in conditional

printing commands?

Just so they don't strike us off their lists in a fit of pique, we ought to say that *Script* is undoubtedly a valuable source of help for LocoScript 2 users on 8000s and 9512 alike. It gives details of all new LocoScript improvements, together with general articles explaining headers and footers etc, all for £9.95 a year from Locomotive Systems, Allen Court, Dorking, Surrey RH4 1YL.

Invoice Number: 1...21799		Unit Price		disc		Item		VAT		Item	
Description		Line		VAT		Total		VAT		VAT	
MANUAL SUBSCRIPTION TO SCRIPT		0.000		0		0.000		0		0.000	
Total Due						0.000					
Total VAT Payable						0.000					
Net Total of Vatable Items						0.000					
Total Including VAT						0.000					

## Double size discs?

The Amstrad User Club circulates a newsletter to all its members with details of new products on its catalogues. Among the recent additions is SBS's 'Clearhead' disc drive cleaning kit. The advert reads, "If you've ever experienced prompts such as 'BAD SECTOR: TRACK 5 SECTOR 21' then

you need worry no longer..."

If you do ever get this message, start worrying. Computer boffins out there will know that PCW discs only have 9 sectors per track, so if your disc drive gets to sector 21 you've got more than just dirty heads!

# CRYSTAL BALLS

Even though this is the February edition of 8000 Plus, the vagaries of the magazine trade mean that it is our first issue of 1988, on sale in January. Traditionally at this time the papers are full of the usual predictions for the forthcoming twelve months – Charles and Di to get divorced, and other old chestnuts. What better time then to indulge in a little gazing into the crystal ball of the Amstrad world?

Amstrad of course have many more products than the PCW. However, their recent fortunes have increasingly been due to sales in the small business sector, and Alan Sugar is sure to see this continuing as a good market place. A product that has been rumoured for some time now by the professional Amstrad watchers is a portable Fax machine ("a facsimile transmission" to the uninitiated). Current Fax machines cost several thousand pounds and are pretty bulky. If salesmen could take a Fax machine with them, plug it into any BT phone socket and send orders or requests back to base it could revolutionise business. With a modem and portable computer you can send messages via electronic mail even now, but to be honest most businessmen don't like the computer jargon electronic mail depends on, and anyway feel happier with a paper copy at the receiving end rather than a disc file. Who knows, a portable Fax could replace the car phone as the executive toy of the year.

Another front that can't have failed to catch Alan Sugar's eye is desktop publishing. The Apple Macintosh has until now been the DTP market leader in serious business, and the strength of the market is illustrated by the fact that Apple DTP systems cost around £5,000 but still sell in droves. If Amstrad could produce a cheap but high quality DTP system, they would make a fortune (well, a bigger fortune). There are two options here. First, they could produce a straight Macintosh clone, which could take advantage of all the existing software much as the Amstrad PC1512 succeeded by undercutting the IBM-PC market. However, this may not prove feasible, so the alternative is to produce a dedicated desktop publishing machine, complete with page makeup software and a built-in laser printer. In effect, this would do for the world of DTP what the PCW did for the world of word processing – provide a system so simple, cheap and effective that it becomes the new standard.

An Amstrad DTP machine would be a worthy successor to the PCW, but it is probably safe to say that such a machine must be a year or two away still. And the price? Well, it would have to be in four figures, so it isn't going to knock the faithful PCW over just yet.

Be Taylor

## Immortal inputs

BRICKS



## Missing persons

Help! We've lost contact with C.P. Edwards from Colerne, Wilts. to whom we owe some money for a recent TipOff. If you'd like to get in touch, the cheque's in the post...

**8000 PLUS**

The March issue of 8000 Plus is on sale on Thursday February 18th. Just right for a late Valentine present!

# NEWSDESK INTERNATIONAL

- ❖ Simple to use, with on-screen selection of options
- ❖ Easy mixing of text & graphics
- ❖ Full A4 page composition
- ❖ Selection of typefaces and font styles in varied sizes
- ❖ Allows input of Locoscript files

## NEWSDESK INTERNATIONAL SOFTWARE complete with the ELECTRIC STUDIO LIGHT PEN

Including Manual & User's Guide

**ONLY £69.95**

## NEWSDESK INTERNATIONAL SOFTWARE complete with the ELECTRIC STUDIO MOUSE

Including Manual & User's Guide

**ONLY £89.95**

## A Comprehensive Desk Top Publishing and page making system

### with KEYBOARD CONTROLLED SOFTWARE, MANUAL & USER'S GUIDE

**AN UNBEATABLE PRICE! ONLY**

**£39.95**

HAVE A HAPPY NEW YEAR



**20% OFF ALL PRICES FOR JANUARY**

## The Electric Studio Bulletin

Example Page

### NEWSDESK INTERNATIONAL PROVIDES LOW COST PUBLISHING

Newsdesk International is a desk-top publishing system for the home or office. It is a comprehensive system which allows you to produce a high quality, professional looking page on your computer. The system is easy to use and the results are impressive.

#### NEWSDESK INTERNATIONAL

The Electric Studio is a complete system for the home or office. It is a comprehensive system which allows you to produce a high quality, professional looking page on your computer. The system is easy to use and the results are impressive.

#### INCLUDE AN ILLUSTRATION FROM THE ELECTRIC STUDIO FREE

The Electric Studio is a complete system for the home or office. It is a comprehensive system which allows you to produce a high quality, professional looking page on your computer. The system is easy to use and the results are impressive.

#### Do you need help in deciding what your requirements are?

Our new showroom is open for demonstrations.....or why not attend our first ever Evening Seminar in January?

For full details - telephone 0462 420222 and ask to speak to Peter Phillips

There is a selection of fonts which can be used with Newsdesk International. One called TYPE can be used with one called BOLD which gives this darker print and there is an ITALIC font to help emphasise a few words at a time.

Script can be used in thick or thin styles or one other.

EXCELLENT RESULTS CAN BE ACHIEVED USING FONTS TO SET THE HEADLINES

Do you need help in deciding what your requirements are?

Our new showroom is open for demonstrations.....or why not attend our first ever Evening Seminar in January?

For full details - telephone 0462 420222 and ask to speak to Peter Phillips

There is a selection of fonts which can be used with Newsdesk International. One called TYPE can be used with one called BOLD which gives this darker print and there is an ITALIC font to help emphasise a few words at a time.

Script can be used in thick or thin styles or one other.

EXCELLENT RESULTS CAN BE ACHIEVED USING FONTS TO SET THE HEADLINES

Do you need help in deciding what your requirements are?

Our new showroom is open for demonstrations.....or why not attend our first ever Evening Seminar in January?

For full details - telephone 0462 420222 and ask to speak to Peter Phillips

There is a selection of fonts which can be used with Newsdesk International. One called TYPE can be used with one called BOLD which gives this darker print and there is an ITALIC font to help emphasise a few words at a time.

Script can be used in thick or thin styles or one other.

EXCELLENT RESULTS CAN BE ACHIEVED USING FONTS TO SET THE HEADLINES

Do you need help in deciding what your requirements are?

Our new showroom is open for demonstrations.....or why not attend our first ever Evening Seminar in January?

For full details - telephone 0462 420222 and ask to speak to Peter Phillips

There is a selection of fonts which can be used with Newsdesk International. One called TYPE can be used with one called BOLD which gives this darker print and there is an ITALIC font to help emphasise a few words at a time.

Script can be used in thick or thin styles or one other.

EXCELLENT RESULTS CAN BE ACHIEVED USING FONTS TO SET THE HEADLINES

Do you need help in deciding what your requirements are?

Our new showroom is open for demonstrations.....or why not attend our first ever Evening Seminar in January?

For full details - telephone 0462 420222 and ask to speak to Peter Phillips

There is a selection of fonts which can be used with Newsdesk International. One called TYPE can be used with one called BOLD which gives this darker print and there is an ITALIC font to help emphasise a few words at a time.

Script can be used in thick or thin styles or one other.

EXCELLENT RESULTS CAN BE ACHIEVED USING FONTS TO SET THE HEADLINES

Do you need help in deciding what your requirements are?

Our new showroom is open for demonstrations.....or why not attend our first ever Evening Seminar in January?

For full details - telephone 0462 420222 and ask to speak to Peter Phillips

There is a selection of fonts which can be used with Newsdesk International. One called TYPE can be used with one called BOLD which gives this darker print and there is an ITALIC font to help emphasise a few words at a time.

Script can be used in thick or thin styles or one other.

EXCELLENT RESULTS CAN BE ACHIEVED USING FONTS TO SET THE HEADLINES

Add these great optional extras to your NEWSDESK system for even better results!



**VIDEO DIGITISER**  
For newspaper-style results, this is the ultimate graphic input device!

**£99.95**

**FONT LIBRARY**  
12 more fonts for inclusion in the Newsdesk publishing system

**£14.95**

**SNIP ART DISKS**  
6 disks containing digitised graphic images to brighten your publication!  
1.General 2.General 3.Nature  
4.Travel 5.Letsure 6.Sport

**£14.95 ea.**

## THE ELECTRIC STUDIO PRODUCTS LTD.

Unit 8, The Cam Centre,  
Wilbury Way,  
Hitchin, Herts. SG4 0TW.  
Telephone: 0462 420222

Please rush me by return:

NEWSDESK INTERNATIONAL @ £39.95.....

NEWSDESK WITH LIGHT PEN @ £69.95.....

NEWSDESK WITH MOUSE @ £89.95.....

(Each of the above includes FREE Xmas Snip Art disk)

VIDEO DIGITISER @ £99.95.....

FONT LIBRARY @ £14.95.....

SNIP ART @ 14.95each

Please indicate which Snip Art disk(s) you require..... 1..... 2..... 3..... 4..... 5..... 6.....

Name .....

Address .....

.....

..... Post Code .....

Tel. No. ....

Please debit my Access/Visa Card No: .....

.....

Expiry Date .....

Signature .....

## Point of Sales trials

Avon Business Computers have launched a new evaluation scheme for their PCW Point of Sales package. The POS system is basically a well thought out idea to use a PCW to print receipts and keep track of cash in a shop. The main problem is that at £194.35 many shopkeepers might be reluctant to take a chance on it.

Now for £10 plus VAT prospective buyers can get a disc, a manual and some receipts so they can try it out for themselves. If they then decide to buy, the £10 is knocked off the final price of the product. For details phone 0761 70543.

## WordStar Professional

In the old days, WordStar was the king of word processors, calling itself the 'industry standard' with some justification. On the PCW, LocoScript, NewWord and then Protext seemed to overtake it, but now MicroPro International – WordStar's makers – are hitting back.

With three million sales of previous versions on all computers, MicroPro have announced WordStar Professional Release 4 for the PCW, aimed principally at office 9512 users. It claims 120 improvements – but price isn't one of them. WordStar 4 costs £194.35, and existing owners of WordStar

can upgrade to the new version for a mere £102.35 including VAT. How this pricing policy dents sales of LocoScript 2 (£19.95) and Protext (£59.95) remains to be seen.

The new model boasts among other things a word counter, a built-in four function calculator, and 'undo' command (which LocoScript users will envy). There's also two-printer access, hanging tabs and proportional spacing (LocoScript users can feel smug as they already have these), though MicroPro note enigmatically that this last feature may require a 'British dictionary'.

Further information from MicroPro on 01-879 1122.

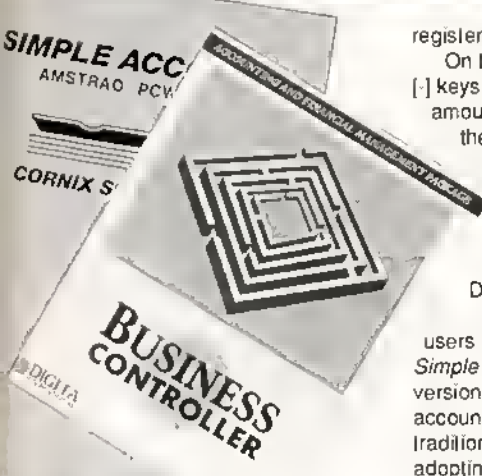


## Horse sense

Have you ever looked at a racecard and wondered how to make sense of all the information – form, runners, riders, prize money and so on? Perhaps you want to go on something more scientific than hunches all the time. DGA's *Pro-Punter*, now available on the PCW, is a program which claims to interpret racing form for you and can advise you where to place your bets. According to DGA, trials in both National Hunt and Flat seasons saw a return of 80% profit on stake investments when the *Pro-Punter* top rated horse was backed.

You key in information about trainers, horses, jockeys, courses and so on and gradually build up a 'knowledge base' on disc. On race day you enter the details from the racecard and then ask the program to advise you on which horse or horses, if any, your money should go. If none of the odds offered on any horse look promising it'll advise you not to bet. Of course DGA can't guarantee you'll win. *Pro-Punter* costs £57.50 and DGA's address is PO Box 36, Ashlon-under-Lyne, OL7 9AJ.

## Holy accounts packages, Vatman



registered small businesses.

On the new version, the [+] and [-] keys will add or subtract the tax amount automatically to or from the figure displayed on the screen. VAT amounts are stored in the memory and can be accumulated or recalled at any time. Details from Digita on 0395 45059.

There's news too for users of Cornix Software's popular *Simple Accounts* package. A new version gives the option of accounting for VAT at either the traditional tax point or, for users adopting the new VAT Cash Accounting Scheme introduced in October, at the cash point.

As well as a free upgrade for existing users, there's a free utility which adapts records to deal with the new system. Further info from Cornix on 0462 682989.

Following our review of accounts programs last month, Digita have made some improvements to their *Business Controller* program. Until now the entry of VAT has been rather cumbersome, making the package unsuitable for VAT-

## Green piece

Have you ever thought as you vegalate in front of your PCW how nice it would be to have some company? HeptaCon, the company responsible for the decision maker *Second Opinion*, have brought out *The*

*Houseplant Disc* to help you choose which plants would thrive best in the conditions of your house.

It's essentially a 'decision database' which holds detailed data on over two hundred different types of plant – the position they prefer, size, their preferred temperature and so on. You run the program when you are deciding which plants would most suit your lifestyle and the environment you live in. The program asks you to give a rating out of 10 to each of several factors such as how important it is that the plants do well in a cold room, how much you want a trailing plant and so on (but nothing about whether you want to talk to them or not). The *Houseplant Disc* then scans its information base and gives you the top 20 most suitable plants on the basis of your preferences.

Plant fanciers can also use the program as a conventional database and access details for each plant individually, by the everyday or Latin names. The *Houseplant Disc* costs £19.90 inclusive of VAT and p&p; details from HeptaCon on 0279 33071.



"NOT ONLY DOES IT CHOOSE IT— IT TALKS TO IT AFTER AS WELL"

## Bottom line databases

Everybody needs a database to organise themselves, and there are two new low-cost PCW databases out this month. *Keybase* is a general purpose database with the usual facilities of sorting on any field, calculations, searches, reports etc, and costs £19.95 from Unicorn Software, 45 West Terrace, Hucknall.

Nollinghamshire NG15 7GD.

Another package, this time specifically designed for cataloguing your record collection and all those back issues of magazines is the pair *LPs* and *Magindex*. These two, written in BASIC for the PCW, sell for £15 from KOS, 99 Orchard Road, Kingswood, Bristol BS15 2TZ.

## Public Domain split

There's a reorganisation going on in the world of Public Domain software suppliers. 'Public domain' is a scheme whereby authors declare their software may be given free to anybody who asks for it. Several clubs exist to distribute this PD software for all computer types, although the clubs usually charge a fee to cover their costs. 8000 Plus reviews one PD program a month.

PD SIG, the Public Domain Special Interest Group, is in the process of building its own library of software from scratch after breaking links with the Public

Domain Software Library. The PD SIG say that the split has come about because the PDSL was becoming cluttered with old software for defunct machines, although the PDSL have a different version of events. The PD SIG are working on their own catalogue which they claim will be better organised and more relevant to PCW owners.

At present they have been concentrating on IBM PC-related products (they already have 300 such discs) but they expect that by the time this magazine reaches the

shops they will have got things organised on their list of PCW programs.

There's a new cataloguing system which categorises PD discs. This follows disputes between the UK public domain suppliers and an American PD outfit 'PC SIG' who claimed that the British libraries were using their copyright cataloguing scheme.

If you want to know more about PD software or the PD SIG itself, phone 0895 51978 (club membership and donating PD programs) or 01 864 2611

(program enquiries).

In response, the Public Domain Software Library point out that they are still operating their list of PCW software normally. As an incentive, they are offering free membership until October 1988 to PD SIG members who wish to carry on taking advantage of the existing public domain library. Send a large SAE for a catalogue to Winscombe House, Beacon Road, Crowborough, East Sussex TN6 1UL for details, or phone 08926 63298.

## Cleaner discs

Following on from their recent PCW disc drive cleaning kit, *Clearhead*, SBS Computer Supplies have introduced *Cleanprint*, a cleaning kit for your PCW printer.

Unlike the conventional printer cleaning kits *Cleanprint* comes in the form of a cassette which fits into your printer like a printer ribbon. You then just 'print' 60 lines of text to clean the printer head. A canister of compressed gas is also included in the £16.95 package which can be used to blow away any small particles from the print head and it even contains cleaning sachets for your hands. It allows you to clean the printer up to eight times.

This is a natural progression following the SBS launch of *Clearhead*. For months the pages of 8000 Plus have been filled with urgent pleas from PCW users looking for a method of cleaning their disc drives. SBS's Steve Wadman said, "You have no idea how frustrating it is when you know there is a demand for something and you can't get anyone interested in producing it."

Eventually they took matters into their own hands and produced their own cleaning kit. For £9.50 the package contains a standard 3"



disc case containing a proprietary cleaning cloth disc and a special cleansing fluid. Every so often, or whenever errors occur, you soak the disc in the fluid, load it for 30 seconds and the makers claim all traces of dust, smoke and oxide particles will be removed. You get enough fluid for 15 cleans. In theory, this process should reduce the number of disc errors you get in both LocoScript and CP/M, protecting data on your discs.

Cleaners are available for most makes of computers but until now there was nothing for the PCW. As

the machines begin to age PCW users are increasingly bothered by 'Read fail' or 'Bad sector' error messages, often a symptom of a dirty disc head.

As proof of the demand SBS claim impressive sales figures. Since the launch in mid-November the company say they have had orders for 15,000 units and they have appointed dealers in America. They are now actively looking for outlets in the lucrative markets French, German and Spanish markets. SBS are on 0273 726331.

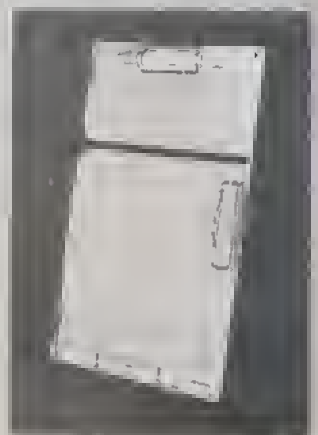
## Moving story

PCW show has been moved from its old haunts of Olympia to the more spacious main hall of Earls Court. (PCW is nothing to do with the PCW, of course, but stands for Personal Computer World). This year there will be separate Business, General Computing and Leisure areas, and the show will run from 14th-18th September. Info on ticket sales and so on will be advertised nearer the time.

## Hold the middle page

Kador have brought out another in their line of hardware add-ons for your PCW desk. The *Dexette* is a free standing clip board device which can be used to hold documents upright next to your PCW for you to copy-type from, or just to prop up your copy of 8000 Plus open at the Tip Ofs page. You can use it in portrait (tall and thin) or landscape (short and fat) positions. It has adjustable clips, wires and pieces of elastic which transform it into a bookrest, a clipboard, or a graphic underlay board complete with line grids and a cursor arm for horizontal lining up.

You can also use it as a write/wipe board using a water based ink, and can even adjust it to be right-handed or left-handed and use both sides simultaneously if you wish. Now how's that for versatility. *Dexette* costs £6.00 in A4 size, £7.50 in the smaller A5 size, and is available from Kador on 0784 252662.



## From Russia with love

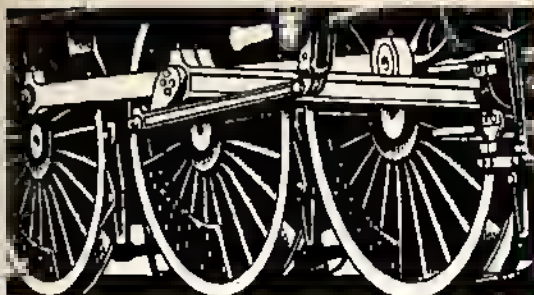
Mirrorsoft (01-377 4837) are releasing *Tetris*, apparently a Russian game, for the PCW. This isn't just another

adventure or shoot-'em-up - it involves quite a bit of thinking. You have to fit together shapes which appear on the screen in a



line at the bottom, using the keyboard or a joystick, and Mirrorsoft say it's dangerously addictive. There's even a 1988 Championship

being organised for those who send in the highest scores with the first prize being a trip for two to Russia (and hopefully back).



# LocoSpell

from Locomotive Software

The Spelling Corrector and Proof Reader for LocoScript 2 on your PCW8512 or 8256

The screenshots show the LocoSpell interface integrated with LocoScript 2. The top menu bar includes f1=Actions, f2=Layout, f3=Style, f4=Size, f5=Page, f7=Spell, and f8=Options. One screenshot shows a text entry "And then when I can't think how to spell a word think of my truble". Another shows a correction dialog for the word "truble" with a list of suggestions: dilating, dilation, dilations, dilative, dilator, dilatorily, dilatoriness, dilators, dilatory, dilemma, dilemmas, dilemmatic, dilettante, dilettantes, dilettanti, dilettantish, and dilettantism. A third screenshot shows a "Stopped at: trouble" dialog with options: Replace and then edit, Edit this word, Consult dictionary, Ignore this word, Mark this word correct, and Add to user dictionary.

■ Now just £19.95

■ 78,000-word dictionary

■ Buy with LocoScript 2 and save £5

LocoSpell checks your typing against Longman's 78,000 word dictionary. When LocoSpell spots a mistake, you can accept its suggested correction, correct the word yourself, or add it to your own private dictionary.

LocoSpell will run on a PCW8256 or PCW8512 with LocoScript 2 version 2.03 or later. On a PCW with 512K memory the 78,000-word dictionary can be read into memory when LocoScript is loaded, and is then always available until it is deleted or LocoScript is re-started. With 256K memory, the 78,000-word dictionary can only be used from disc, though a 17,500-word dictionary can be used from memory. Locomotive Software recommends the upgrading of PCW8256s to 512K memory for the best operation of LocoSpell. The Locomotive Memory Upgrade Kit is available for this purpose.

To: Ruth Ibbert, Locomotive Systems,  
Allen Court, Dorking, Surrey, RH4 1YL  
Phone (0306) 887902

Name

Address

Postcode

Please send me the following products

- |  |        |
|--|--------|
| <input type="checkbox"/> LocoSpell for LocoScript 2  | £19.95 |
| <small>requires LocoScript 2.03 or later.</small>    |        |
| <input type="checkbox"/> LocoScript 2                | £19.95 |
| <input type="checkbox"/> LocoScript 2 with LocoSpell | £34.90 |
| <input type="checkbox"/> Memory Upgrade Kit          | £24.95 |

Total

- ☐ I enclose a cheque payable to  
Locomotive Systems Limited
- ☐ Charge to my Access Card

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
----------------------	----------------------	----------------------	----------------------

One of the most exciting things about the PCW range of computers is that they have become the standard workhorse computer for small businesses.

Throughout the country people who always said, "We can't afford a computer" are realising that for little more than the cost of a filing cabinet they can buy a word processor too.

But the PCW is more than a wordprocessor, as Amstrad's adverts always said. Once they've realised that the PCW is a computer as well as a typewriter, most businesses invest in a cashbook or accounts program, and maybe – with tender dreams of a paperless office – a database program.

The trouble is that if you're running an organic farming project you probably don't want half of the features in typical business software, such as fixing your shareholders dividends for the year. Similarly, most doctors would be bemused by the question, "What was the capital cost of your tractor?" If you buy a database program, inevitably you've got to spend a week setting it up so that you have got all the categories you want. What you need is something pre-set to take all the information that your line of business uses.

Of course the thing about computers is that you can program them to do whatever you want. In theory. The only snag is that you have to have a certain amount of technical skill to do that, and a lot of spare time which most business people don't have. But it ought to be possible to have a program which does *exactly* what you want – no more and no less – and can be adapted to fit your needs as they change.

### And now the good news

Throughout the country there are people in specific businesses who have taken the trouble to write programs for themselves, and often these programs are then marketed commercially for others in the same line to benefit from. This highly specialised software is called 'Vertical Software'. If your business has any trade magazines or papers, the best thing to do is to scan the small ads where you are likely to find a helpful soul offering advice.

Buying specialist software is not like buying a database or word processor. The person selling it will be the author of the program, and usually will be only too pleased to receive suggestions on how to improve the program. If you ring up Amstrad to suggest how LocoScript could be improved you will get pretty short shrift, but if you ring up a typical vertical

# WHAT'S

Tinker, tailor, soldier or VAT collector... there's a good chance someone has written a program just for your business

software producer they may well be able to modify the program to suit in a few days and send you a new version.

Prices range from the very cheap to the very expensive. As with everything in life, you get what you pay for. At £10, don't expect too much in the way of after-sales support, but some of the programs aimed at the more affluent professions cost over £100 and for that you can expect to get regular upgrades of the program if your business changes (maybe due to a change in the law) and to be able to ring up for personal advice if things go wrong. After all, we're talking about computerising your livelihood here, not just playing a game.

All prices quoted in the following reviews *exclude* VAT, since most businesses claim it back anyway.

## REQUISITION – Catering

£65 ● Cantlow Software (Pear Tree Cottage, Aston Cantlow, Solihull, West Mids B95 6HZ)

### ● All PCWs

Requisition is a program designed to help catering managers or ambitious housewives gauge the correct quantities of ingredients to order and how much to charge for a given menu.

It is essentially a database specifically for recipes and foodstuffs. You have to make two sets of data for the program to draw on. First you set up a cost list of ingredients which is along the lines of "Onions – 24p per pound, Eggs – 105p per dozen" and so on. You can express the cost as being for a pound, a kilo, a pint, a litre, a dozen, or 'each'. If prices change you can alter any individual ones later on.

## Anatomy of a product

The path from having a good idea to selling a finished product is not easy. First of all, you have to have a working program. Make sure that it is easy to use, and that it can cope with other people's methods of working as well as your own without needing to modify the actual program code itself.

Now comes the hard part, selling it. You will need a foolproof manual which assumes no computer knowledge at all, but equally isn't too trivial for the expert to use. The manual is very important, and may well take you as long to write as the program itself.

Presentation is important. Typesetting and printing manuals and packaging is expensive, although nice if you can afford it. The best thing to do is to print a master copy of the manual from your PCW (preferably with a daisywheel printer) and then photocopy it onto some clayey paper – say a pafe Conqueror stock or similar. Photocopying shops can then heat-seal or spiral bind it into a card cover. If

you can manage it, a properly printed disc label and inlay card for the disc box will make potential customers think you are a serious professional outfit.

Finally, sell the product. Mail order is the best way, so you'll need to advertise. Bear in mind that all readers of 8000 Plus own PCWs but very few may be in your business, and all readers of your trade paper are in your business but very few may own PCWs. Six of one, half a dozen of the other.

Overall, your material production costs might be around £10 a unit (i.e. the basic disc cost plus photocopying), or more if you use professional printers. Of course the development time and cost of your PCW are extra – how much you charge for those is up to you – the 'professions' (solicitors, doctors etc.) will probably be prepared to pay more than shopkeepers and publicans for a program.

RECIPE FILE: RECFILE		
NAME:	CHILLI CON CARNE	
DATE:	25th December 1987	
DAY:	FRIDAY	
TIME:	1pm	
ROOM:	LLAMA SUITE	
SCHEME:		
RECIPE NO:	1	
PORTIONS:	24	
INGREDIENT	QUANTITY	COST £
GROUP B		
GARLIC	18	0.54
CUMIN	30 gms	0.17
		GROUP TOTAL = £ 0.71
GROUP X		
LEAN MINCE	2.718 kg	10.50
		GROUP TOTAL = £ 10.50
GROUP Y		
ONIONS	1.362 kg	0.30
CHILLIES	30	1.50
TOMATOES, PULPED	2.718 kg	1.38
		GROUP TOTAL = £ 3.18
		TOTAL COST = £ 14.39
		SELLING PRICE (= 50 % profit) = £ 28.77
		VAT (= 15 %) = £ 4.32
		TOTAL PRICE = £ 33.09

# MY LINE?



Second, you start to type in your recipes. You enter each of the ingredients in turn along with the quantity of each needed, and you also tell the program how many portions the quantities you are giving will make, eg. 'feeds 4'. As you type each ingredient's name it is checked against the ingredient database, and if it isn't found you are asked if either you have made a typing mistake or if you want to add the new ingredient to the list.

Once set up – which would take you some time if you have lots of recipes – you can now cost your recipes reliably. After working out the menu for a certain day, you type in the number of mouths to be fed, the dishes to be served and the profit margin needed, and the program will print out a list of what ingredients you need to order and what price you should be charging (it doesn't print formal menus). You also get the option of adding extra ingredients not in the recipe, for a bit of variety. You can store up to 750 ingredients and 400 recipes – disc space permitting – at any one time.

This seems a very handy way of producing lists of ingredients for your menu choices, particularly if someone

else has to do the actual buying. You've got to make the effort to keep your price lists up to date with seasonal price fluctuations.

The only real flaw is that the units Requisition chooses as its standards are inflexible. For example, when buying you would probably express the cost of chillis as 180p per lb, although in a recipe you would want to say 'use 4 chillis'. Requisition forces you to express 4 chillis as, say, 0.1 lb in the recipe.

## FEE MANAGER – Dentistry

£499 ● Practice Systems (061-320 8134) ● 8000s only

Fee Manager is designed to help NHS dentists keep track of patients' treatments, and to work out how much to charge the patient and how much to claim from the NHS under the constantly-changing rules. It will also print out the details in the appropriate places on the standard FP17 claim form.

The program falls into two stages. First you go through a database-type section where you record patients' personal details, including an on-screen annotated examination chart. Then with the details on file you can print out an estimate for the patient, or an itemised bill. All the charges are NHS standard and are stored in the program as supplied.

A great deal of thought has gone into the manual, and it runs to 200 A5 pages in a ring binder. Obviously it assumes you are *au fait* with dentistry terminology, but takes you pretty clearly through the basic steps of setting up the software.

Fee Manager runs on '8000s only' in that the instructions for lining up the FP17 on the printer are specifically about the 8000 dot matrix printer, and it prints its output in 17-pitch text. In fact, the 9512 will just about work if you fit a Mini Gothic print wheel.

This is the costliest of the specialist packages reviewed, as a result of which its 'Value Verdict' rating suffers in comparison. As you would expect at the price, it is the most professionally presented. It's a bit slow at retrieving data and working out the charges (a 10-second delay is not untypical). Included in the price is six month's support (like program upgrades should the scale of charges change) and setting up the program for your practice personnel. It's a pity there is no way for the user to alter the scale of charges, since you really have to wait for a new version of the program to be issued each time the NHS charges change.

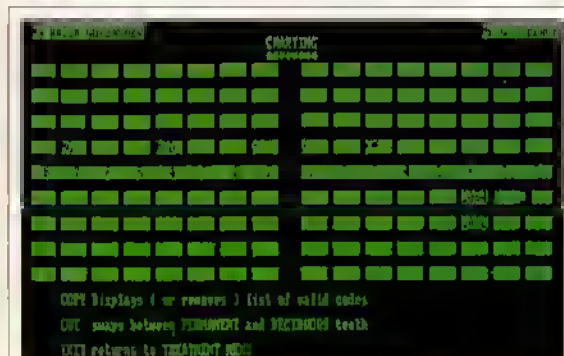
The charges for your course of treatment are calculated as follows:

EXAMINATION	Price
SCALING & POLISHING	£ 14.20
RAYS	£ 1.10
FILLINGS	£ 32.30
EXTRACTIONS	£ 7.40
SUBTOTAL	£ 55.00

For this subtotal, you should pay the first £ 17.00 and A&E of the remainder.  
Your charge for the above treatment is therefore £ 38.00

## 9512 tricks

When we say that the software here will run on the 9512, it may involve a bit of work on your part. You will need to copy the programs onto a 9512-disc, and also you will need to set the printer to 'Matrix' rather than 'Daisy' mode. If you don't, all £ signs come out as 'h's.



▲ Preparing a patient's examination chart in Fee Manager

## REQUISITION ● £65

RANGE OF FEATURES ■■■■■ SPEED ■■■■■  
EASE OF USE ■■■■■ DOCUMENTATION ■■■■■  
8000 PLUS VALUE VERDICT ■■■■■

## FEE MANAGER ● £499

RANGE OF FEATURES ■■■■■ SPEED ■■■■■  
EASE OF USE ■■■■■ DOCUMENTATION ■■■■■  
8000 PLUS VALUE VERDICT ■■■■■

AMSTRAD COMPUTERS

Ask for our catalogue

Tel: 01-993 7855 Fax: 01-578 2352

# Your One-Stop Shopping Centre

## HARDWARE PCW

NOW IN STOCK —

**NEW** PCW 9512  
complete with  
Daisywheel printer  
OUR PRICE ONLY £545.00

PCW 8256 — £343 PCW 8512 — £453

Additional Disk Drive for PCW 8256	£144.50
Modem	£99.95
RS232 Interface	£57.85
8256 Memory Upgrade	£27.50

## PART EXCHANGE

Trade in your old PCW 8256/8512 for PC1512 or 1640. Call for prices

Callers welcome — Mon-Sat 9.30-5.30  
Companies why not open a Credit account for  
regular purchases and contract supplies

## LEISURE FOR YOUR PCW

Cyruss Chess II	£14.00
Lord of the Rings	£18.00
Fiarlight	£13.00
Bridge Player	£18.00
Leather Goddesses	£20.00
Zork I	£20.00
Enchanter	£20.00
Witness	£20.00
Ballyhoo	£20.00
Planetfall	£20.00
Hitchhiker's Guide	£20.00
Cuthroats	£20.00
Sorcerer	£20.00
The Living Daylights	£15.00
Steve Davis Snooker	£13.50
Guild of Thieves	£22.00
Blackstar	£13.50

## AMX MOUSE WITH DESKTOP

Graphic Font End — Desk Diary, Phone Address Book —  
Memopad £69.50

## PCW DESKTOP PUBLISHING

Fleet Street Editor Plus	£49.45
Electric Studio — Newsdesk International	£38.52
The Database Publisher (Software)	£28.75
Database Desktop Publisher (with AMX Mouse)	£67.85

## LISTING PAPER & LABELS

2000 sheets 11" x 14.5" 1 pt 60gsm	£15.50
1000 sheets 11" x 9.5" 2 pt 60gsm	£16.95
2000 sheets 11" x 9.5" 1 pt 60gsm	£13.49
1000 sheets 11" x 9.5" 2 pt NCR	£22.16
2000 sheets A4 Size 1 pt 70gsm Micro Perf	£15.94
1000 sheets A4 Size 1 pt 85gsm Micro Perf	£9.95

LABELS	1 across	2 across
2000 3 1/2" x 1 1/8"	£8.05	£9.20
2000 3 1/2" x 1 1/8" 1/2"	£10.65	£11.84
2000 4" x 1 1/8"	£8.65	£9.65
2000 4" x 1 1/8" 1/2"	£11.80	£12.72

\* available in Blue, Yellow, Pink, Green (£1 extra)  
OTHER SIZES ARE AVAILABLE

## DISC STORAGE

BOX CLEVER and protect  
your disks with these high quality  
perspex, lockable storage boxes  
Holds 20 3 1/2" Disks & Cases  
with 20 dividers

AMS 20L £9.95

KES 20L £7.95 (with 4 dividers)



## SOFTWARE

### ACCOUNTING

Sage Popular Accounts	£84.95
Sage Payroll	£59.45
Sage Invoice/Stock Control	£59.45
Sage accounts Plus	£127.45
Camsort Invoice/Stock/Sales ledger	£79.96
Camsort Payroll	£39.96
MAP Integrated	£119.20
Sandpiper Accounting System	£120.00

### WORDPROCESSING

Locomail	£31.96
Locoscript for Locoscript II or I	£31.96
New Word II	£55.96
Micro Pro Pocket Wordstar	£39.99
Micro Pro Pocket Wordstar Deluxe	£55.96
Protect	£63.16
Tasword 8000	£20.40

Locoscript 2	£18.50
--------------	--------

Amor Prospell	£23.98
---------------	--------

### SPREADSHEET

Amsoft Supercalc II	£41.65
Newsstar Cracker II	£41.65
Caxton Scratchpad Plus	£47.99

### DATABASE

dBase II	£95.00
Caxton Conder I	£79.99
Caxton Cardbox	£47.92
Sage Relieve	£55.99
Camsort Cambase II	£39.96
TAS	£101.95
Amsoft Microfile/Microword	£39.95
Sage Magic Filer	£55.99
Masterfile 8000	£47.50

### GRAPHICS

DR Draw	£39.96
DR Graph	£39.96
Electric Studio Lightpen	£64.00
Electric Studio Mouse Set	£114.00
Electric Studio Video Digitiser	£92.50

### PCW COMMUNICATION

Sage E Mail	£59.95
Sage Viewdata	£59.95
Sage Combo (E&V)	£84.99
Sage Chi Chat (E&V) includes Modem	£209.00

### LANGUAGES

French Mistress Kosmos	£16.95
German Master Kosmos	£16.95
Spanish Tutor Kosmos	£16.95
Italian Tutor Kosmos	£16.95

### SPECIAL OFFERS on Typing Tutors

Caxton Touch 'n' Go	£19.50
lansysl Crash Typing	£19.50
lansysl Two Fingers	£19.50

PCW9512 Daisywheels £5.80  
Many Typestyles

## Low Prices!

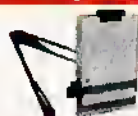
### NEW RIBBONS

	1	2
DMP1	£3.90	£3.70
PCW8256/8512	£4.45	£3.85
PCW8256/8512 Red or Blue	£5.45	£4.85
PCW 8256/8512 Carbon	£5.45	£4.85
DMP 2000/3000	£4.45	£3.85
PCW9512	£3.85	£3.75

### COPY HOLDER

- \* Adjustable
- \* Desk Clamping
- \* Versatile
- \* Convenient

Only £19.50



With MasterScan you  
can reproduce any  
picture on your PCW  
screen — and print it  
out as often as you  
like. £63.25

Incorporate graphics into packages as The  
Desktop Publisher, Fleet Street Editor Plus and  
Newsdesk. Send Scanned images via modem to  
other PCW's anywhere



MasterScan  
and  
MasterPaint  
£17.25  
£69.00

## Mini Office PROFESSIONAL



Very successful with many new features  
Consists of Five separate programs —  
\* Wordprocessor \* Database \* Spreadsheet  
\* Graphics \* Communications Interactive.  
Our price £28.95



Four Brilliant  
Programs —

* Business Controller — for complete accounting to	£95.00
* Financial planning	£38.50
* Datasort II	£23.95
* Supertype II (Locoscript II compatible)	£23.95
* Personal Tax Planner — calculate your income taxes.	£23.95

## BOOKS FOR PCW

Advanced Amstrad Basic (Locomail)	£12.95
Amstrad 8256/8512 More Wordprocessing	£9.95
Amstrad CP M Plus	£12.95
Amstrad Comms CPC/PCW Ranges	£8.95
Amstrad Companion (Mailart)	£7.95
Amstrad Word Processing PCW 8256	£8.95
An Introduction CP/M Plus on Amstrads	£7.95
Get Started Amstrad PCW 8256/8512	£7.95
Introducing Amstrad CP/A Ass Lang	£9.95
Mastering Amstrad PCW 8256/8512	£8.95
Practical Reference Guide W-Pro. Amstrad 8256	£5.95
Practical Amstrad Word Processing	£7.95

## 3" AMSTRAD DISCS

	CF2
5...	£13.95
10...	£24.75
20...	£48.50
	CF2-DD
5...	£29.00
10...	£49.95
20...	£89.00

## DUST COVERS

PCW 9512 (3 piece)	£12.45
PCW 8256 (8512 3 piece)	£11.45
PC 1640 (2 piece)	£9.50
PC1512 (2 piece)	£8.50
DMP 2000/3000	£4.50
DMP 4000	£5.50

You order by 3pm We despatch by 4pm

Overseas customers are supplied Tax Free



Kavin Computer Supplies  
3 Market Place  
Acton, London W3 6AL  
PRICES INCLUDE VAT

Official Orders Welcome from PLC, Government & Educational Establishments.  
All products covered by KCS Guarantee

Mall Order + Export Hot Line phone 01-993 1198  
Telex 947838 GEEWS Dept KCS All prices include VAT  
P&P Charges — Ribbons 25p each  
Computer Listing Paper £3.00 per odx  
All other items 50p each, Maximum £7.50



**TAXIBASE – Taxi operators****£9.50 ● Mercury (089 283 3056) ● All PCWs**

In contrast to much specialist software, Taxibase costs less than £10. It is a very simple program written using BASIC's Jetsam tiling system, but very effective for what it sets out to do.

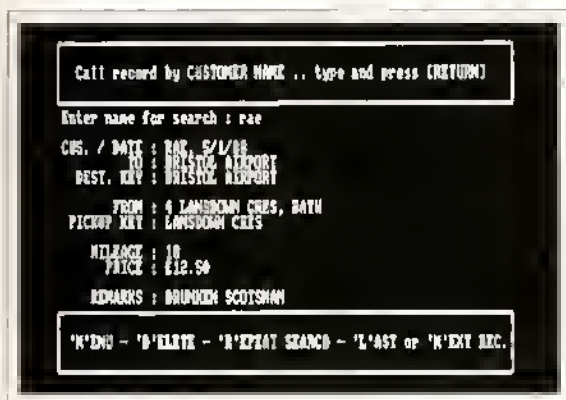
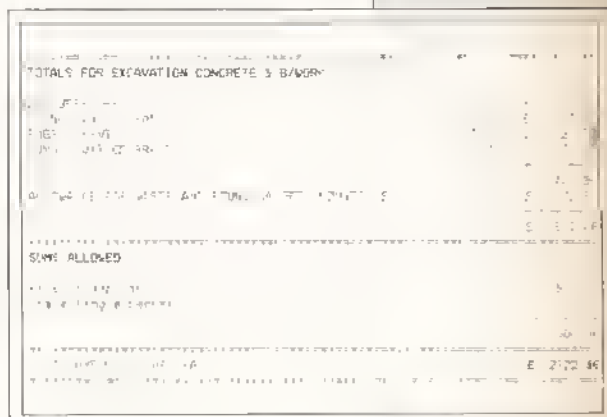
It is designed for taxi companies who need to give telephone quotes on how much a trip will cost. It is essentially a customised database holding details of pick-up and set-down points, customer's details and the charge. Then by looking up the records new customers can be given an estimate based on previous experience, and regular customers can be charged the same each time to avoid embarrassment.

You can search the database very flexibly. It is possible to list all trips by a particular customer, all trips from a certain

relevant amounts of sand, gravel and cement.

The labour times for particular jobs are built-in, so once you've fixed the area to be excavated, for example, the man-hours required are calculated. You can adjust times to suit your own working practices, as you can adjust the prices of materials. Finally, an itemised estimate is printed out, in varying levels of details as you request.

Overall, the building estimator is a well designed package. The only possible problems would crop up if you use unusual building methods or materials not catered for in the predefined options menus, although McGregor Software say they will happily talk to customers with special requirements.



pick-up, all trips to a certain set-down, or any combination of these.

Every now and again you will need to clear out dead wood from the records to make way for new customers. How often this happens depends on how big your business is, but Taxibase copes with this procedure fairly happily.

The manual is brief but adequate. A few illustrations of typical screen shots would have been nice. Even though the package is cheap, Mercury say they are pleased to give telephone support to users.

Although we could only test it in a fairly small customer list (50 or so names), the speed seemed to be good enough so that you could look up records of old quotes in a couple of seconds while talking on the phone. Definitely a good value program.

**MCGREGOR ESTIMATOR – Builders****£99 ● McGregor Software (0387 88612) ●****All PCWs**

This is a program to help builders estimate how much a job will cost. It is quite sophisticated in what it knows about the building trade – but then it's written by a firm of builders.

When quoting for a contract, you naturally split your estimating into excavating, concrete work, walling and so on. The program is totally menu-driven, so you position the cursor bar over the option you want and press [ENTER]. Suppose you are doing walling: once into the walling section, you are presented with a menu of possible building materials, and you just choose the right one. Then you type in the dimensions, and the program automatically calculates the materials needed.

The start-up disc always copies its files to the M drive every time you run the program, which takes a minute or so. There is a lot of built-in data, saving you typing in facts yourself. For instance, on specifying a certain amount of concrete mix, the estimate will convert this for you into the

**STOCK CONTROL/ACCOUNTS –****Licensees****£69.52/£86.91 ● GT Micros (0604 810720) ●****All PCWs**

A package to help those involved in the licensed trade keep tabs on their levels of stock and necessary re-orders. GT provide two programs, stock control and accounts separately, or you can buy the two combined for £156.43 (plus VAT).

The package runs simply from a series of menus and prompts, although it does sulk by beeping furiously at you every time it prints anything on the screen to be read. The stock control allows you to enter various categories such as beers, spirits, cigarettes, snacks in terms of their size (eg. 1.5l bottle), cost price, sales price, opening and closing stock. It then works out the cumulative profits and stock movements to help you reorder. The accounts section of the package is well-suited to a cash operation, and like all accounts software assists rather than replaces your auditing process.

The documentation is the weak aspect of this system. The get-you-going instructions are printed on the package itself, but there is no paper manual. Instead there are about 10 screens of text which you can read and print out. Text files on disc are never as satisfactory as paper manuals.

GT Micros claim a base of 60 satisfied users all over the country to their credit. Several of them have agreed to talk to prospective buyers who might want to know the practicalities of the system in a pub. GT offer a range of related services like a telephone support service running up to 11 pm.

**TAXIBASE ● £9.50**

RANGE OF FEATURES	■■■■■	SPEED	■■■■■
EASE OF USE	■■■■■	DOCUMENTATION	■■■■■

**8000 PLUS VALUE VERDICT ■■■■■****MCGREGOR ESTIMATOR ● £99**

RANGE OF FEATURES	■■■■■	SPEED	■■■■■
EASE OF USE	■■■■■	DOCUMENTATION	■■■■■

**8000 PLUS VALUE VERDICT ■■■■■**

## Words of wisdom

The packages mentioned in this article are in all probability only a small fraction of the specialist software around, but as far as we are aware it is a fair representation of the ongoing situation at this moment in time.

Don't forget that if you do buy a program for your business, specialist or general, you will need to spend a few days getting used to it, and you may even need to adapt your working practices slightly to fit in with the program.

The only way to get a system which is totally suited to your own business is to write it yourself. As a general piece of advice, if you are a confident programmer then by all means do this, the PCW's Mallard BASIC is a good system for most applications. If you haven't

done much programming before, then on no account should you consider writing any major programs on which your business will depend - big programs take months to write and never work first time.

A final option is to commission someone to write a program for you. This isn't necessarily ruinously expensive, maybe costing £100 to £500 depending on complexity, but make sure the programmer is competent (ask to speak to some of his previous clients) and insist on getting good documentation and after-sales support at the end. If the program is of general interest, make sure that if you have paid someone to write it they don't sell further copies of it without giving you a cut!

Disc	Program	Price	Notes
1	STOCK CONTROL	£69.52	
2	ACCOUNTS	£86.91	
3	STOCK CONTROL	£69.52	
4	ACCOUNTS	£86.91	
5	STOCK CONTROL	£69.52	
6	ACCOUNTS	£86.91	
7	STOCK CONTROL	£69.52	
8	ACCOUNTS	£86.91	
9	STOCK CONTROL	£69.52	
10	ACCOUNTS	£86.91	
11	STOCK CONTROL	£69.52	
12	ACCOUNTS	£86.91	
13	STOCK CONTROL	£69.52	
14	ACCOUNTS	£86.91	
15	STOCK CONTROL	£69.52	
16	ACCOUNTS	£86.91	
17	STOCK CONTROL	£69.52	
18	ACCOUNTS	£86.91	
19	STOCK CONTROL	£69.52	
20	ACCOUNTS	£86.91	

installing a complete PCW system including the hardware, and they will do the time-consuming task of typing in your initial stock levels too.

### TIMEDATA - Solicitors

£95.00 • Appropriate Technology (0602 222352) • 8512/9512 only

Timedata is a program designed for use by a solicitor's practice. It is effectively a database of which people have spent how much time on certain client accounts, and it also provides useful summaries and statistics on the data.

The package needs an 8512 to run on, since it specifically keeps its data on a B-drive disc. Up to 10 fee earners can be incorporated into the system, with two or three people per disc. In other words you might use 5 data discs for a complete 10 solicitor practice. It claims to cope with up to 700 client files and almost 15,000 transactions per disc, and any number of discs can be used.

### STOCK CONTROL/ACCOUNTS • £69.52/£86.91

RANGE OF FEATURES ■■■■■ SPEED ■■■■■  
EASE OF USE ■■■■■ DOCUMENTATION ■■■■■

8000 PLUS VALUE VERDICT ■■■■■

### TIMEDATA • £95

RANGE OF FEATURES ■■■■■ SPEED ■■■■■  
EASE OF USE ■■■■■ DOCUMENTATION ■■■■■

8000 PLUS VALUE VERDICT ■■■■■

Time is charged in 6 minute units, and each unit is assigned to one of ten charge categories (eg. 'travelling', 'in court') which can be set up as is convenient. Timedata is designed as an internal monitoring and accounting aid, so it does not actually print out client invoices.

Part of the program is a section to calculate what you ought to be charging per time unit for each fee earner. This is based on the Law Society's standard instructions, and you are asked to give details of the practice's expenses, everyone's salaries etc. Being confidential information, this

Disc	Transaction Category	Rate	Value	Total Value	Fee Earner
100000	TRAVELLING	1.50	5.00	5.00	STACEY 01
100001	TRAVELLING	1.50	2.50	2.50	STACEY 02
100002	TRAVELLING	1.50	1.50	1.50	STACEY 03
100003	TRAVELLING	1.50	1.50	1.50	STACEY 04
100004	TRAVELLING	1.50	1.50	1.50	STACEY 05
100005	TRAVELLING	1.50	1.50	1.50	STACEY 06
100006	TRAVELLING	1.50	1.50	1.50	STACEY 07
100007	TRAVELLING	1.50	1.50	1.50	STACEY 08
100008	TRAVELLING	1.50	1.50	1.50	STACEY 09
100009	TRAVELLING	1.50	1.50	1.50	STACEY 10
100010	TRAVELLING	1.50	1.50	1.50	STACEY 11
100011	TRAVELLING	1.50	1.50	1.50	STACEY 12
100012	TRAVELLING	1.50	1.50	1.50	STACEY 13
100013	TRAVELLING	1.50	1.50	1.50	STACEY 14
100014	TRAVELLING	1.50	1.50	1.50	STACEY 15
100015	TRAVELLING	1.50	1.50	1.50	STACEY 16
100016	TRAVELLING	1.50	1.50	1.50	STACEY 17
100017	TRAVELLING	1.50	1.50	1.50	STACEY 18
100018	TRAVELLING	1.50	1.50	1.50	STACEY 19
100019	TRAVELLING	1.50	1.50	1.50	STACEY 20
100020	TRAVELLING	1.50	1.50	1.50	STACEY 21
100021	TRAVELLING	1.50	1.50	1.50	STACEY 22
100022	TRAVELLING	1.50	1.50	1.50	STACEY 23
100023	TRAVELLING	1.50	1.50	1.50	STACEY 24
100024	TRAVELLING	1.50	1.50	1.50	STACEY 25
100025	TRAVELLING	1.50	1.50	1.50	STACEY 26
100026	TRAVELLING	1.50	1.50	1.50	STACEY 27
100027	TRAVELLING	1.50	1.50	1.50	STACEY 28
100028	TRAVELLING	1.50	1.50	1.50	STACEY 29
100029	TRAVELLING	1.50	1.50	1.50	STACEY 30
100030	TRAVELLING	1.50	1.50	1.50	STACEY 31
100031	TRAVELLING	1.50	1.50	1.50	STACEY 32
100032	TRAVELLING	1.50	1.50	1.50	STACEY 33
100033	TRAVELLING	1.50	1.50	1.50	STACEY 34
100034	TRAVELLING	1.50	1.50	1.50	STACEY 35
100035	TRAVELLING	1.50	1.50	1.50	STACEY 36
100036	TRAVELLING	1.50	1.50	1.50	STACEY 37
100037	TRAVELLING	1.50	1.50	1.50	STACEY 38
100038	TRAVELLING	1.50	1.50	1.50	STACEY 39
100039	TRAVELLING	1.50	1.50	1.50	STACEY 40
100040	TRAVELLING	1.50	1.50	1.50	STACEY 41
100041	TRAVELLING	1.50	1.50	1.50	STACEY 42
100042	TRAVELLING	1.50	1.50	1.50	STACEY 43
100043	TRAVELLING	1.50	1.50	1.50	STACEY 44
100044	TRAVELLING	1.50	1.50	1.50	STACEY 45
100045	TRAVELLING	1.50	1.50	1.50	STACEY 46
100046	TRAVELLING	1.50	1.50	1.50	STACEY 47
100047	TRAVELLING	1.50	1.50	1.50	STACEY 48
100048	TRAVELLING	1.50	1.50	1.50	STACEY 49
100049	TRAVELLING	1.50	1.50	1.50	STACEY 50
100050	TRAVELLING	1.50	1.50	1.50	STACEY 51
100051	TRAVELLING	1.50	1.50	1.50	STACEY 52
100052	TRAVELLING	1.50	1.50	1.50	STACEY 53
100053	TRAVELLING	1.50	1.50	1.50	STACEY 54
100054	TRAVELLING	1.50	1.50	1.50	STACEY 55
100055	TRAVELLING	1.50	1.50	1.50	STACEY 56
100056	TRAVELLING	1.50	1.50	1.50	STACEY 57
100057	TRAVELLING	1.50	1.50	1.50	STACEY 58
100058	TRAVELLING	1.50	1.50	1.50	STACEY 59
100059	TRAVELLING	1.50	1.50	1.50	STACEY 60
100060	TRAVELLING	1.50	1.50	1.50	STACEY 61
100061	TRAVELLING	1.50	1.50	1.50	STACEY 62
100062	TRAVELLING	1.50	1.50	1.50	STACEY 63
100063	TRAVELLING	1.50	1.50	1.50	STACEY 64
100064	TRAVELLING	1.50	1.50	1.50	STACEY 65
100065	TRAVELLING	1.50	1.50	1.50	STACEY 66
100066	TRAVELLING	1.50	1.50	1.50	STACEY 67
100067	TRAVELLING	1.50	1.50	1.50	STACEY 68
100068	TRAVELLING	1.50	1.50	1.50	STACEY 69
100069	TRAVELLING	1.50	1.50	1.50	STACEY 70
100070	TRAVELLING	1.50	1.50	1.50	STACEY 71
100071	TRAVELLING	1.50	1.50	1.50	STACEY 72
100072	TRAVELLING	1.50	1.50	1.50	STACEY 73
100073	TRAVELLING	1.50	1.50	1.50	STACEY 74
100074	TRAVELLING	1.50	1.50	1.50	STACEY 75
100075	TRAVELLING	1.50	1.50	1.50	STACEY 76
100076	TRAVELLING	1.50	1.50	1.50	STACEY 77
100077	TRAVELLING	1.50	1.50	1.50	STACEY 78
100078	TRAVELLING	1.50	1.50	1.50	STACEY 79
100079	TRAVELLING	1.50	1.50	1.50	STACEY 80
100080	TRAVELLING	1.50	1.50	1.50	STACEY 81
100081	TRAVELLING	1.50	1.50	1.50	STACEY 82
100082	TRAVELLING	1.50	1.50	1.50	STACEY 83
100083	TRAVELLING	1.50	1.50	1.50	STACEY 84
100084	TRAVELLING	1.50	1.50	1.50	STACEY 85
100085	TRAVELLING	1.50	1.50	1.50	STACEY 86
100086	TRAVELLING	1.50	1.50	1.50	STACEY 87
100087	TRAVELLING	1.50	1.50	1.50	STACEY 88
100088	TRAVELLING	1.50	1.50	1.50	STACEY 89
100089	TRAVELLING	1.50	1.50	1.50	STACEY 90
100090	TRAVELLING	1.50	1.50	1.50	STACEY 91
100091	TRAVELLING	1.50	1.50	1.50	STACEY 92
100092	TRAVELLING	1.50	1.50	1.50	STACEY 93
100093	TRAVELLING	1.50	1.50	1.50	STACEY 94
100094	TRAVELLING	1.50	1.50	1.50	STACEY 95
100095	TRAVELLING	1.50	1.50	1.50	STACEY 96
100096	TRAVELLING	1.50	1.50	1.50	STACEY 97
100097	TRAVELLING	1.50	1.50	1.50	STACEY 98
100098	TRAVELLING	1.50	1.50	1.50	STACEY 99
100099	TRAVELLING	1.50	1.50	1.50	STACEY 100

section does not appear on the program menus, and you have to get to it via a series of almost Masonically obscure passwords and codes!

The manual is clearly worded and very good. With the package you get 4 discs: the program, a backup copy, a demonstration data disc and a blank data disc for your use. You also get some printer paper and a filing binder. For an fee, Appropriate Technology will install the system for you.

Timedata seems a well designed piece of software. As long as it fits your billing practices, it should prove good value.

### Name Dropping

There's a lot of specialist software around, and we haven't been able to test all of it. Among the other professions catered for in the world of PCW software are (all prices exclude VAT):

**Farming** Sum-It Computer Systems (024 027 238) sell a range of packages specially for farmers. In addition to an accounts program at £400 and payroll at £200, there is a range of specialist management programs. At £350 each, yours is the choice of Field Management (fertiliser planning etc.), Herd Management (covering dairy and calving recording), Cattle Management (livestock buying and selling), Sheep Management, and finally Pig Management. Sum-It's software needs a printer capable of condensed print, so as ever you could get by with a 9512 and Mini Gothic daisywheel, but an 8256/8512 is better.

**Newsagents** MG Consultancy (1 Second Avenue, Grimsby, South Humberside DN33 1DF) offer *Datanews*, a program at £75 which claims to store details of up to 99 different delivery rounds to 9999 customers. It allows for customer holiday breaks, and of course deals with invoicing, adding cigarettes or sweets to the account, and spotting overdue debts.

**Video hiring** Also from MG Consultancy is *Video Manager* (£30), covering stock inventories, membership records, Top 50 hire charts, VHS/Beta/Other format recordings, and noting privileged or blacklisted members.

With the low-cost PCW machines, Amstrad have managed to put computers into businesses of all sizes. The next part of the computer revolution is to make sure everyone has the right software for their needs - let's hope the programs in this article are only the start.

LocoScript user. . .



Instead of this . . .

. . . you can have this



£6.99

## MENU-MATE™ . . . THE FACTS AT YOUR FINGERTIPS

Never forget another command with Menu-mate™ Templates to remind you. Save time and end frustration because commands and simple instructions are at your fingertips for quick and easy reference.

Richman Software's Menu-Mate™ is easier to use than books or reference cards, the facts are complete, properly organised to help you and available at a glance.



The first in a range of keyboard templates for popular micros and software.

PATENT APPLIED

Select options instantly, by-pass the menus. Why press six keys when two will do the same job?

See the exact appearance of your letter *as you type it* . . . no more guesswork.

Throw away the manual! Menu-Mate™ gives simple instructions on cutting, copying and pasting blocks and phrases for instant reference.

Never lose work because it wasn't saved. Menu-Mate™ acts as a constant reminder *and shows you how!*

Shows special features of LocoScript almost unknown.

PCW is a trademark of Amstrad plc  
LocoScript is a trademark of Locomotive Software.  
Menu-Mate is a trademark of Richman Software

LOCOSCRIPT 2 COMPATIBLE

Menu-Mate™ is precision cut to fit the PCW Keyboard exactly. This allows stability and easy removal.

Special introductory price of £6.99 + p&p includes free LocoScript guide.

Generous discounts available for bulk purchase.

Call for quantity discounts or quotations on custom made templates to meet your special needs.

**ORDER NOW ON THE FORM BELOW AND KEEP THE JOY IN YOUR JOYCE!**

Please make Chq/P.O. payable to:  
Richman Software, FREEPOST, Harlow  
Essex CM20 1BR Tel: (0279) 25401

Please send . . . . . Menu-Mate®/s at £6 99  
+ £1.25 p&p to:

Name: . . . . .

Address: . . . . .

Overseas add £4.00 p&p payable in Sterling  
Allow 21 days delivery  
Major credit cards accepted

Mini reviews bringing new PCW typefaces for old, and good news for Z88 owners

### Z88-PCW Import/Export Utility

£24.95 ● C Port Ltd (01-376 5098) ●

#### All PCWs

It is a sign of how popular the Z88 portable computer has become to PCW owners that C Port have launched a new utility especially to help move files from one machine to the other. Called the "Z88-PCW Import/Export Utility" (we'll call it Impex) the most complicated thing about it seems to be its title.

For your money you get a cable to join your Z88 to your PCW, a disc with software and a manual. You still need your own PCW serial interface, costing around £60, so the total package could add around £90 to the real cost of your Z88.

Apart from the cable you don't really need any of this package. Anyone reasonably conversant with PIP should be able to transfer files without Impex quite successfully. However, using PIP can cause utter panic and confusion in some users and many will pay £24.95 quite happily rather than face the intricacies of the PCW and the Z88 manuals – two documents unlikely to rank high in the Top Ten most readable books of the year.

Strangely enough with Impex the manual is probably of

more use than the software. It takes you carefully through every possible combination in simple terms and great detail. You can pass text and program ("binary") files back and forward between the two machines using the Z88's 'batch send' and CP/M's wildcards (like send \*.DOC). You can't directly send LocoScript files to the Z88 – you need to go through an ASCII file, although the manual takes you through the required stages fairly clearly.

Impex takes care of details like recognising the names of files being sent from the Z88, which PIP could never do, and allows you to choose whether to overwrite an existing file of the same name. It is in these details that Impex wins. With PIP you can get a file into the Z88 without much problem but



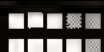
would you be able to get it to the correct RAM pack? With Impex that is no problem.

Another of Impex's features is that it allows you to print directly from the Z88 to the PCW's printer. Even so, most PCW users would be well advised to load a text file into the comparatively friendly environment of their PCW word processor to get things right before printing.

RANGE OF FEATURES  
EASE OF USE



PERFORMANCE  
DOCUMENTATION



8000 PLUS VALUE VERDICT

### SUPERTYPE II

£24.95 (£12.50 for upgrade) ● Digital International (03954 5059) ● 8000s only

The original SuperType was a great idea. Instead of churning out the same old boring PCW typeface you could choose one of eight different faces (four business and four exotic) and pretend that you had something more grand than

a PCW. It worked in CP/M and marvellously enough in LocoScript too.

One thing always spoilt it however. You could only have one font per LocoScript disc, so to use all eight fonts you really had to set aside both sides of four discs, one side for each font, and restart with the new disc every time you wanted to change typeface.

Now, with SuperType II specially designed for LocoScript 2 users, life is decidedly easier, although you still can't have all eight fonts available at all times. LocoScript 2 can handle all kinds of printers using up to four 'printer drivers' – the information necessary to let the computer run a printer.

What SuperType II does is pretend that its fonts are printer drivers allowing you to keep and use up to four fonts on a disc, subject to having a big enough M drive.

There were some problems with the early versions of SuperType in handling proportional spacing, when the letter spacing looked a bit strange. Not only have they overcome these problems, they now positively advise you to use proportional spacing to get the text looking right.

The fonts are attractive even if the customary Olde English is not too easy to read. The business faces are clear and business-like and have the advantage of being distinctly different from the Amsfrad font, although whether a special bold font is needed given that you can print any other face in bold is debatable.

Stencil, Outline and Vaudeville (presumably because it's 'jazzy') are all eye catching although could be wearing for long stretches of text.

You still can't change typefaces in one document but at least now you don't have to restart every time you want to change. With a bit of practice it is not too difficult to achieve interesting effects.

This is what Stencil looks like in bold, italic and in enlarged text

This is what Business 1 - the round business face - looks like in bold, italic and in enlarged text

This is what Business 2 - the square business face - looks like in bold, italic and in enlarged text

This is what Business 3 - the boldbusiness face - looks like in bold, italic and in enlarged text

This is what Business 4 looks like in bold, italic and in enlarged text

This is what the Olde English font looks like in bold, italic and in enlarged text

This is what Vaudeville looks like in bold, italic and in enlarged text

This is what Outline looks like in bold, italic and in enlarged text

▲ The SuperType II fonts in proportional spacing

RANGE OF FEATURES  
EASE OF USE



PERFORMANCE  
DOCUMENTATION



8000 PLUS VALUE VERDICT

# cp software



## CLOCK CHESS 88

CLOCK CHESS 88 is the strongest and most versatile chess program yet for your PCW computer. It has the most advanced 3D graphics, the widest range of options, the power to play incredibly fast and the intelligence to selectively search deep into the position. CLOCK CHESS 88 has been tested against a wide range of other chess programs and has shown itself to be stronger than any of them.

Written using the latest techniques CLOCK CHESS 88 does not use the usual 'brute force' method of searching for the best move, but instead is packed with chess knowledge which uniquely allows it to search only those moves which are 'sensible' or 'interesting' and not to waste time analysing lines of play which it regards as 'stupid'. In addition it has a variable search depth which results in a deeper search of interesting or active lines, thus reaching those parts that other chess programs cannot.

- massive 44,000 byte openings library (user extendable)
- stunning 3-D graphics
- annihilates other PCW chess programs.
- largest range of options, cursor controlled for easy move input
- special easy mode for beginners
- full display of its thought processes gives you a fascinating insight into its search mechanism
- perfect understanding of all the rules of chess including underpromotion, draw by repetition and the fifty move rule.
- achieves all the standard mates including those occurring with minor pieces in the endgame - well able to handle difficult pawn endings
- makes full use of the extra memory of the 256K and 512K PCW

This is what reviewers said about the original Clock Chess, and this new version is even better:

- "magnificent display ... feeling of playing a real chess match" - Computing with the Amstrad
- "clearer display ... plays a stronger game" - Putting your Amstrad to work
- "all the features needed, tough game, very well done 3D effect" - Amstrad Action

CLOCK CHESS 88 IS COMPATIBLE WITH ALL PCWs £15.95

all you ever wanted to know - PLUS -  
about GRAPHICS, THE UNIVERSE  
AND EVERYTHING FOR PCW  
but were afraid to ask



UPGRADED VERSION - WITH YET MORE HITHERTO UNPUBLISHED INFORMATION

- 50+ ROUTINES AND 100% PCW COMPATIBILITY
- Create devastating graphics using fast, smooth sprites.
- Make direct use of RAM disc.
- Create User Defined Graphics.
- Modify character set, send UDGs and enlarged characters to dot matrix printer.
- Experiment with sound routines.
- Directly access Video Ram.
- Discover hitherto unpublished hardware information, Port Specifications and Edge Connector diagram.
- Easy to use from Basic, Pascal, C, Assembler etc.
- Access to CP/M functions, full source code supplied.

NEW PLUS VERSION FEATURES INCLUDE:

- MORE low level hardware information
- Ability to page and directly access in all 512K ram segments.
- Bit mapped keyboard scanner for fast games software.
- Tips on making your code run faster by using ram disc segments.
- Tips on speeding up video ram calculations

ROUTINES INCLUDE:

Linedraw/Erase, Pixel Plot/Erase, Flood Fill, Create/Plot/Move Sprite, Change char. set, UDGs, Turn Screen on/off, Invert Screen, Sound, Send UDGs and Double Height/Double width chars to dot matrix printer, Wait for Frame Flyback, Delay, Randomiser, Move Cursor anywhere, Read Joystick, Disc Motor On/off, Full Software Reset, Save/Load Memory from disc or Ramdisc, Find System Clock, Save/load Screen ...AND MUCH MORE!

Comprehensive manual plus detailed documented source code.

- "ALL YOU EVER..." as used by Starglider authors, Real Time Software
- "An excellent package, well described, fast, good manual, very versatile" 8000 Plus
- "Makes it easy to create complex looking graphics, the best package I have used" Popular Computing Weekly

"ALL YOU EVER + " IS COMPATIBLE WITH ALL PCWs £24.95  
Upgrade only ..... (Return old disc) £12.95

## BRIDGE PLAYER 2000 WITH TUTOR

THIS IS THE BRIDGE PLAYER for both the expert and beginner, with versatile bidding that sets a really high standard, matched by powerful card play.

Generates random hands and allows proper bidding in the ACOL system, using STAYMAN, BLACKWOOD and a choice of NO-TRUMP conventions.

Integral Tutorial section with 20 set hands, advice and explanation. Massive range of options and comprehensive information displays.

"The program is very well thought through and serves a dual function. First of all, if you want to learn how to play then you can do so easily in Tutor mode, and secondly, if you can play but can't find three others to play with, then here's your chance to keep your hand in using Player mode."

The Tutor teaches you the game as you play by ensuring that you don't make wrong moves. At the end of the game you get a full page of text analysing the whole game, explaining the bidding process and sequence of play, together with an analysis of underlying tricks and possibly alternative ways to outflank your opponents.

In the Player mode there's a wide range of restart and go back one move options which ensure you can learn something new each time... The display is fine, the table sits in the middle and you play your round with lots of info about the last trick and the score displayed around the edge of the screen... This is a very thoughtful way to get the most out of Bridge on the computer... Bridge Player 2000 is a good one" PC Plus.

"Large and simply explained Tutorial, easy for beginners, could easily keep a Bridge player occupied for the rest of eternity" 8000 Plus

BRIDGE PLAYER 2000 IS COMPATIBLE WITH ALL PCWs £15.95



## LIGHTNING BASIC

70+ NEW BASIC KEYWORDS AND 100% PCW COMPATIBILITY, THE ULTIMATE PCW MALLARD BASIC EXTENSION.

First ever program able to trap Mallard Basic's command list. Produces devastating graphical output with fast smooth sprites for the games programmer and icons for more professional software. We guarantee you will astound yourself with your capacity for creativity using this amazing software.

Many original features provide the ideal environment for the Basic programmer.

- high and medium resolution graphics, plots, lines, circles, fills
- multiple sprites and icon graphics
- User Definable Graphics, new character sets
- new editing facilities, variable list, search etc.
- save screens and instant multi-screen recall
- full A4 screen dump to dot matrix printer
- timer, sound routines etc, etc.
- easy cursor and printer control
- all functions use simple-to-use BASIC keywords
- masses of demonstration programs supplied on disc

"knocks spots off other basics!"

LIGHTNING BASIC IS COMPATIBLE WITH ALL PCWs £19.95

please rush me the following titles for my PCW:-

PRODUCT	PRICE	QUANTITY
All you ever wanted - PLUS	£24.95	<input type="text"/>
Upgrade only (return old disc)	£12.95	<input type="text"/>
Lightning Basic	£19.95	<input type="text"/>
3-D Clock Chess	£15.95	<input type="text"/>
Bridge Player 2000	£15.95	<input type="text"/>
Postage to Europe (per item)	£ 1.20	<input type="text"/>
Postage ex Europe (per item)	£ 2.00	<input type="text"/>
UK post and packing included		

card no. Please debit my ACCESS/VISA card Expiry date

I enclose a cheque/postal order to the value of:

Name:  £

Address:

Postcode:  Signature:

CP SOFTWARE, Stonefield, 198 The Hill, Burford, Oxfordshire, OX8 4HX  
Credit Card Hotline: 0993 82 3463 Telex: 57784 MCCL G

# THE LAST BATTLE

AMS's new desktop publisher is finally here, waging war on its three rivals. Alec Rae checks out its firepower.

## STOP PRESS

£49.99 (with mouse £89.99)

● AMS (0925 413501) ● All PCWs

The one thing that Stop Press, AMS's new desktop publishing package, can show the software industry is that even when a market looks over-crowded you can still find a niche by taking a new and imaginative approach.

There are people producing newsletters for clubs and churches who have found the DTP revolution a god-send: neat presentation with one or two illustrations can turn a boring article into a best-seller. But not many people would consider producing a large number of pages regularly on the PCW. The length of time the printer takes to print out a single page would mean that you would have missed your deadline before page three was completed.

On the other hand there are many times when you would gladly use a piece of graphics to brighten up a long report or even just give it an extra bit of interest with a fancy font. All desktop publishing programs can do this of course, but Stop Press allows you to do it with real flair. Stop Press is aimed not just at the laying out of two-column parish newsletters but also works well producing slick advertising fly-sheets, impressive letter-heads, fun party invitations, exciting circulars or even just brighter business reports.

## Let's compromise

There is, of course, only so much program that can be packed into the limited space of a PCW and with a complicated concept like desktop publishing this means making compromises.

The choice is whether to use the available space to concentrate on graphics and design or on text handling. Stop Press definitely puts the emphasis on design and

graphics, and the most obvious sign of compromise is

the fact that unlike its competitors it doesn't have an inbuilt text editor.

Instead of editing the text in the program you prepare all your files in LocoScript (either 1 or 2 will do). Having perfected the grammar and spelling in friendly, familiar surroundings you mark all the italics, bold, underlining and reverse text with the usual LocoScript codes. The program picks all these up correctly although it can't handle codes like centring or different pitch sizes. You can try text files from other word processors although these have varied results and won't allow you to put in the emphasis codes (which has to be done within Stop Press).

You can then set the number and size of the columns you want on your page (up to 9) and run the text in. You can set windows to confine the text in a certain area or you can stop the flow of text by pressing [EXIT] – it usually stops at the end of the next line. And of course it stops automatically at the bottom of a page. You can then move on to the next column or you can save that page and start another page to take the overflow.

There are some very sophisticated features governing how the text is laid out in the columns. You can automatically centre everything, have it 'ragged right' (the words normally spaced set against the margin on the left) 'ragged left' (the text set hard against the right margin) or justified (the letters spaced to completely fill the line).

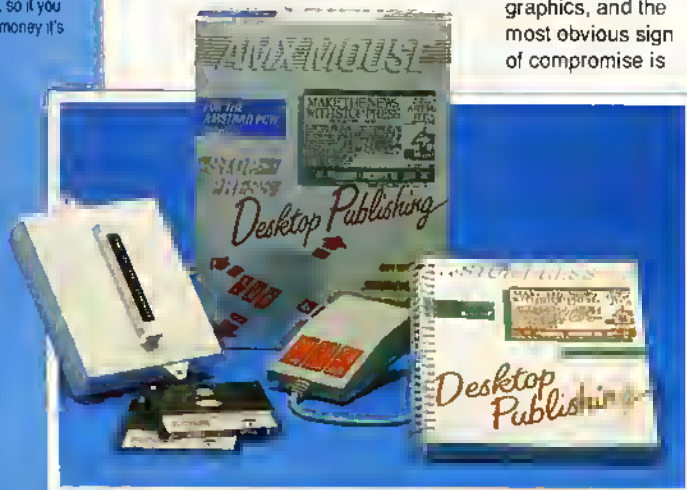
Then there is the ultimate feature – 'autoflow', which allows you to place a piece of graphics in a column of text and run the text around the edge of the picture to fit it. With an irregularly shaped illustration using justified text this looks particularly impressive and is popular with all the modern computer designed newspapers and magazines who want to show off what their systems can do.

## Oops!

In theory this should all work beautifully if you don't take into account Sod's Law of Desktop Publishing – "You never see

## For mouse haters

Stop Press will work by keyboard control alone – you can move the cursor around the screen and select from menus by using the arrow keys. However, it is much easier with a mouse, so if you can afford the extra money it's well worth it.



the last spelling mistake until too late".

Once text is on the screen it is treated as graphics, ie. just a pattern of dots on the screen. You can't edit text as such, but you can blank over an unwanted paragraph and manually move the rest of the text up to fit. Similarly, you can correct spelling errors by writing a blank area over the mis-spelt word and then 'patching' a corrected version over. Problems only occur if the correction won't fit the space or when you've used justified text and there are odd spaces that are difficult to reproduce.

However you can face major problems in placing text files on the page if things go wrong. When you are learning any system you are inclined to make mistakes. Normally this is no problem but if for instance you start tilling the third or fourth column on a page which happens to have an illustration in it without putting autoflow on the words run right over the picture and you have lost your place in the text file. The only answer

seems to be to close the file and start again. The moral is, before any major text placing operation save your current version so that if anything goes wrong you can have another go.

There is another minor niggle in some of the settings that Stop Press has as its defaults (ie. the ones it uses unless you tell it otherwise). The program assumes that any text should be centred in the columns - not the most natural way to handle body text.

### Which face today?

On the other hand experimenting or 'lucky accidents' will also produce some startling effects that often do just as well. The greatest boon for this is the 'undo' facility which will put experiments back to where they were. This does not always work - specifically you can't undo the placing of text which has gone wrong - but even if it doesn't it is not too difficult to erase the part of the screen that has gone wrong and starting again.

You can divide the page up into columns of equal size, an extremely useful feature, but allowing for up to nine columns seems a bit like overkill. On the normal A4 page even six columns would be getting a bit narrow although someone will probably find the nine column format ideal for laying out charts or tables.

The normal Amstrad screen typeface is also loaded automatically for body text, but if you would prefer there are a couple of small fonts that are available.

A major problem for any page designer is making everything fit. The main worry is whether a piece of text will fill a space - a situation that is admittedly better catered for in other DTP packages. If you have too much text one answer is to run it to another page (the 'continued on p94' trick). A Stop Press document can only be one page, so you have to have a separate file for each page of your

publication, although arranging for the overmatter from one page to run onto another is easy.

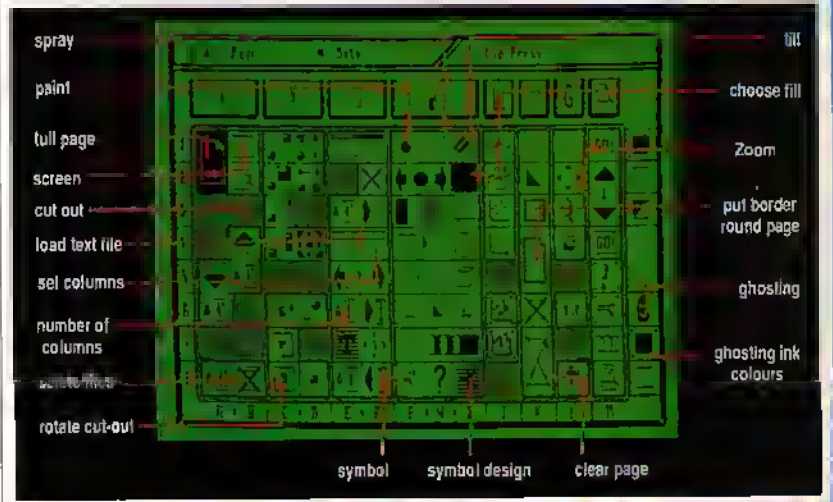
### Head too big?

One area where you can get a lot of fun and produce interesting results is in writing headlines. There are 14 different fonts giving a wide variety of styles. Admittedly not all of them would be suitable for a normal newspaper format - a banner headline in Futurist

or Old English might not have the immediate legibility that most editors would want. But there are some solid business type faces mixed in with these more exotic faces which are really intended for fancy invitations or letter-heads.

Stop Press is particularly good at tackling the constant battle of getting the headline to fit the space available. Each type face takes up a different amount of space; there are 18 different text sizes and the width and height of each face can be independently adjusted to produce "fall thin" or "short fat" versions, so you should find a suitable face that comes near.

There are sensible fonts  
**AND THERE ARE EXOTIC FONTS**  
And of course the statutory Old English font  
**So Whatever You Want You will find**  
**One to suit -**  
And if it doesn't quite fit you'll be able to  
Or else **Stretch it to fit**



## On the menu

It has to be admitted that Stop Press offers so many facilities that it could be quite frightening for the beginner. To overcome this the designers have come up with an ingenious double method of giving commands.

The main way to select functions like draw, fill, read a text file is by pressing a couple of buttons on the mouse to produce a screen-size menu. Every feature is represented by an 'icon' (a memory-joggling picture). Some of the icons are not too obvious at first sight - for instance there are five which are subtle variations of a disc drive, and working out which is the one to load a file

isn't obvious. But even the most entrenched 'manual ignorer' should get the hang of things by trying out each icon methodically. And if all else fails the manual is quite well written and attractively presented.

Once you've got used to Stop Press, having to call up the menu each time is tiresome, so every icon is given a grid reference by its row and column on the menu. You can do a function directly without bringing the menu up (like LocoScript's {+} key command shortcuts) by just pressing the two keys of the grid reference, eg. 'L4'.

Once you have chosen your typeface and size you can adjust things further by changing the 'kerning' (the space between the letters) to give a properly proportionally spaced feel, and/or the 'leading' (the space between the lines). One slight problem with the kerning option in a heading is that it is inclined to cut down the space between words so much that they seem to run into one another — easy enough to get over by typing several spaces between words.

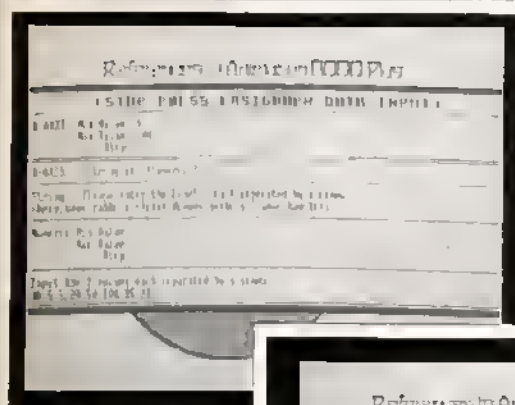
## Take a graph

One feature that is sure to cause interest is 'Easigraph', which at last provides a relatively easy method of presenting data graphically on the PCW.

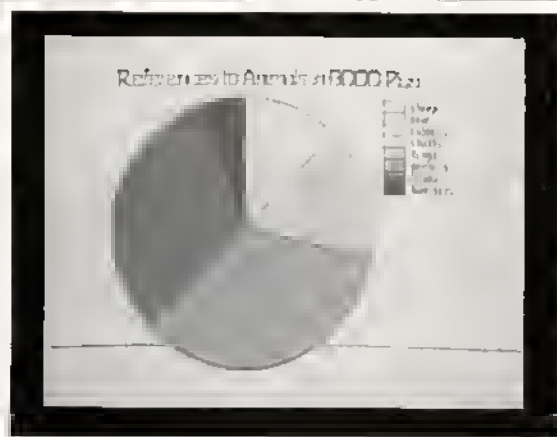
Judging by our postbag, a large number of PCW users are looking for reasonable graph drawing package but many

previous attempts have either failed through trying to cover every eventuality and therefore being too complicated or making life easy and being too primitive.

The Stop Press graph drawer is quite simple and there is a full example already loaded to let you see how things work. You just type in the numbers to be



▲ You use the same screen to enter the data for all the different types of graphs and pie charts



▲ The finished product. How the information looks in the form of a pie chart

charted and choose the options of Pie Chart, Bar Chart (or 'Histogram') or ordinary line graph. Stop Press then places your chart anywhere you want on the page and if you cannot find how to achieve exactly what you want by way of a graph



▲ You can see the effects of your changes as you use the zoom

you can add to or modify the resulting graph to suit. One option is to leave the areas of the bar or pie charts blank so that you can pick whichever 'fill' patterns for them you like.

## Graphics power

Without doubt however, the strength of the program comes from the graphics section which is in fact better than any of the 'stand alone' graphics packages on the PCW. It is well designed and easy to use and carries most of the features you could want from it.

There is quite a range of clip art provided with the program, and the designers have taken a sensible attitude choosing the sort of digitised pictures that would come in really useful for club newsletters, such as rugby posts or a badminton racket for instance. But if you get bored with these you can adapt them (or any piece of graphics), overlaying text and adding new features.

For those times when you don't have a suitable clip art or digitised illustration to brighten up your text you can go away and draw it. You don't necessarily need to be 'artistic' to get something out of Stop Press. It has all the shape drawing facilities you want (triangles, squares, cubes, circles and ellipses) which can be empty, black or filled with a pattern as you require and you can 'fill' any shapes with one of 64 patterns.

There is a solidity about the graphics and a precision that makes detailed work easy. The zoom facility is particularly good. You position it easily where you want on the screen and the 'zoomed' part shows up in a window at the bottom of the page so you can see the effect of changes as they happen. The cursor is very steady under the mouse's control so picking any spot exactly is easy.

You can design your own area fill patterns, and people using the program for technical drawing can design their own special symbols. Electronic circuits would be easy if you had the symbol for a transistor defined which can easily be placed anywhere you want on a diagram.

'Ghosting' is a real fun feature. It simply allows you to superimpose one image with another. Every image is made up of a mixture of black and white pixels (black and green on 8000 series screens!) and the trick with ghosting is that you can superimpose shaded fill patterns on solid objects to give a grey effect, or ghost a picture with itself to make a shadow — this gives a three dimensional look to an image.

## Text or graphics?

But even more important from a DTP point of view is the way that you can use the graphics package to increase the flexibility of the other sections of the package.

## Pixels

When you display graphics on a computer screen, they are made up of thousands of dots which are either on or off. These dots are called 'pixels' (short for 'picture elements'). If you look closely in LocoScript or CP/M, you will see that each character is made up on an array of 8 by 8 pixels.

## How does it compare?

So there are four desktop publishing programs out for the PCW: in order of appearance, Newsdesk International (Electric Studio, £39.95), Fleet Street Editor Plus (Mirrorsoft, £59.95), The Desktop Publisher (Database, £29.95) and now Stop Press (AMS, £49.95). Is any of them clearly the best?

As with all things in life, there is no simple answer. Two things are for sure though: Stop Press will kill Newsdesk stone dead — it does all that Newsdesk does and more, and does it better. Also, The Desktop Publisher has pretty much killed Fleet Street Editor — it is more reliable, has more readable body text, and is simpler to use.

So really the two contenders are Stop Press (£49.95) and The Desktop Publisher (£29.95). The difference between the two is that The Desktop Publisher is very text oriented — you can actually edit text in the columns on the made-up page. However, its headline fonts are very basic and jagged. Stop Press is much more graphics oriented, and allows you to create some stunning visual effects on the page.

If you need to be able to edit the body text of articles much on-screen, you may find TDP more convenient, but for creating impressive headlines and illustrations, Stop Press is the winner. Why not get both!

# POPULAR RANGE SAGE PCW SOFTWARE

**THE PERFECT PARTNER FOR THE  
AMSTRAD PCW 9512 FROM SAGE.**

With Sage Popular business software you can be more than word perfect on your Amstrad PCW 9512.

The Sage Popular range of low cost, high quality programs will let you computerise your accounts and payroll, create databases, access viewdata and use electronic mail.

Designed for the entire Amstrad PCW family, Sage Popular software operates in plain English so you can get professional results quickly, without having to fight your way through all the usual jargon.

And whichever program you choose, you get 90 days' technical support absolutely free.

Send the coupon for details and introduce your Amstrad PCW to Sage Popular business software - you'll find they make perfect partners.

All programs are suitable for the Amstrad PCW 9512, 8512 and 8256.

Sagesoft plc,  
NEI House, Regent Centre,  
Gosforth,  
Newcastle upon Tyne NE3 3DS  
Tel: 091-284 7077.  
Telex: 53623 SAGESL G  
Fax: 091-285 0332.

## THE SAGE POPULAR BUSINESS RANGE

<b>ACCOUNTS</b> £87 for bookkeeping & accounting.	<b>CHIT-CHAT</b> £87 for E-mail and viewdata.
<b>ACCOUNTS PLUS</b> £130 full feature accounting with invoicing and stock recording.	<b>CHIT-CHAT COMMUNICATIONS PACK</b> £225 with modem & cable for E-mail and viewdata.
<b>INVOICING</b> £61 for accounting and invoicing.	<b>RETRIEVE</b> £61 for data management.
<b>PAYROLL</b> £61 for automatic payroll processing.	All prices shown are exclusive of VAT.

Please send me full details of the Sage Popular Business Range.

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_

Tel: \_\_\_\_\_

Sagesoft plc, NEI House, Regent Centre,  
Gosforth, Newcastle upon Tyne NE3 3DS

# Stop Press compatibility

The recent DTP boom on the PCW has meant that there are a large variety of different manufacturers marketing different digitisers, mice, software and so on. To their credit, AMS have tried to make Stop Press compatible with as many as possible of these third party items, not just with their own products.

Stop Press can of course be driven with an AMX Mouse, and the Kempston mouse also works (although only having two buttons rather than AMX's three means you have to use the [DOC] key as the third one). The Electric Studio Light Pen and Mouse and the Trojan Light Pen will not work as input devices.

Stop Press can read most graphics files which are stored as pixel-for-pixel screen images. This means it should work with pictures produced by MasterScan, MasterPaint, Electric Studio Art, Oraughtsman, and the Rombo and Electric Studio video digitisers. Also, graphics (but not necessarily made-up pages) stored by Fleet Street Editor Plus, Newsdesk International and The Desktop Publisher should be OK.

Picture files stored by DR Graph, DR Draw, Microdraft and GrapPad will not work (these use special format files, not screen pixel images).

Everything on screen can be handled like a piece of graphics. Just as you can rotate a picture in 90° turns, double its size or reverse it you can do the same with a headline, or a piece of text giving an almost endless variety of design 'tricks.'

But this has a far more practical purpose for those few moments of life when things go just a little wrong. If you put a piece of text in the wrong place you just move it to the right spot like a piece of graphics. The program adds a lot of guide-lines to help you line things up just right, and even if you just get it slightly wrong there is a 'slip and slide' option which allows you to line-tune the position until it is spot on.

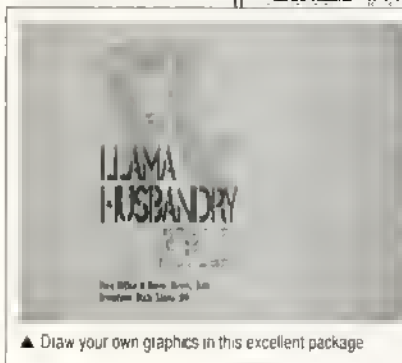
Headlines can be written in any of the till patterns and you can use ghosting to make headlines and reversed boxes more interesting.

## The final product

Printing out a DTP produced page is never quick on the PCW, and Stop Press is not really any quicker than its rivals (it takes about 20 minutes a page.) However the program does allow you to specify how many of copies of each page (up to 9) and to choose how many different pages you want to print. On an 8512 or a 9512 you can save up to 12 pages on a disc (3 on an 8256 disc) so in theory you could set the machine to print a total of 108 pages (while you were away your holidays presumably) although whether the printer ribbon could stand this is debatable.

Stop Press will run on a 9512 using an 'Epson compatible' dot matrix printer - virtually all dot matrix printers will work. All you have to do is, before running Stop Press, give the CP/M command `DEVICE LST:=CEN`. Converting the Stop Press work discs onto 9512 format is not hard, but isn't covered in the manual (which assumes auto-booting 8000 series discs) at all, so you need a bit of intelligence.

Normally you would really want to print out a single page and photocopy it. It produces a quite reasonable quality of print-out with an even texture.



▲ Draw your own graphics in this excellent package

only bug we discovered during the review was a problem with running text into the last column on a page. The program seems to think there are two very narrow rogue columns between the last two you set up, so if you aren't careful you get text running into those.

AMS say they have fixed this problem, and they will produce a corrected program which will be available free to anybody who buys the early version. However, another problem which is apparently harder for them to fix is to do with taking graphics from non-AMS systems. Loading full screens (like from MasterScan) works fine, but although the manual claims that Stop Press can read the clip-art files from the other desktop publisher programs, it doesn't.

Notwithstanding these niggles, Stop Press is an excellent package that gives wide scope for page design of all kinds. The graphics design facilities are so good that people already using other DTP packages might consider buying Stop Press to use in conjunction with more text biased programs.

## PLUSES

- Excellent graphics facilities, as good as any dedicated graphics package
- Wide variety of novel headline type styles
- Menu and key commands suit both the beginner and the expert.
- Sophisticated text handling features like autoflow.
- 'Easigraph' makes putting graphs in documents simple

## MINUSES

- No text editing ability
- Undoing wrongly placed text can be tricky

RANGE OF FEATURES  
EASE OF USE



PERFORMANCE  
DOCUMENTATION



8000 PLUS VALUE VERDICT

## PCW SOFTWARE

### WORD PROCESSORS

LOCOMAIL 1	£33.95
LOCOSPELL 1	£33.95
LOCOSCRIPT 2	£19.95
LOCOSPELL 2	£19.95
LOCOMAIL 2	£29.95
LOCOSCRIPT 2 & LOCOSPELL 2	£34.90
NEWWORD 2	£57.95
PROTEXT	£57.95
TASMAN TASPELL 8000	£14.95
TASMAN TASPINT 8000	£12.95
TASMAN TASWORD 8000	£18.95

### ACCOUNTS

MAP INTEGRATED SUITE	£139.95
MICRO SIMPLEX	£89.95
MONEY MANAGER	£21.95
MONEY MANAGER PLUS	£33.95
SAGE POPULAR ACCOUNTS	£75.95
SAGE POP. ACCOUNTS PLUS	£114.95
SAGE ACC. SUPER COMBO	£149.95
SAGE POPULAR INVOICING	£53.95
SAGE POPULAR PAYROLL	£53.95
SAGE STOCK & INVOICING	£59.95
SAXON CASHBOOK ACCOUNTS	£25.95

### GRAPHICS

DR DRAW	£44.95
DR GRAPH	£44.95
EXBASIC	£11.45
FLEET ST. EDITOR PLUS	£48.95
ELEC. STUDIO FONT LIBRARY	£14.45
ELEC. STU. SNIP ART (1-5)/EACH	£14.95
MICRODRAFT	£89.95
POLYPLOT	£22.95
POLYPRINT	£26.95
POLY SERIES (COMPLETE)	£49.95
POLY TYPEFACE 2	£17.95
POLY TYPEFACE 3	£17.95

### DESKTOP PUBLISHING

THE DESKTOP PUBLISHER	£24.95
STOP PRESS	£49.95
MASTERSCAN	£68.85
NEWSDESK INTERNATIONAL	£35.95

### DATABASES

DBASE II	£84.95
CAMBASE	£44.95
CARDBOX	£49.95
DATABASE MANAGER (AT LAST)	£28.95
AT LAST PLUS	£35.95
DELTA 1.25	£76.95
MASTERFILE 8000	£44.95
SAGE RETRIEVE	£53.95

### SPREADSHEETS

MINI OFFICE PROFESSIONAL	£26.95
CRACKER II	£38.95
CRACKER II TURBO	£44.95
MULTIPLAN	£58.95
SCRATCH PAD PLUS	£45.95
SUPERCALC II	£38.95

### LANGUAGES

DR C BASIC COMPILER	£44.95
DR PASCAL MT +	£44.95
FTL MODULA-2	£49.95
HISOFT C (WITH EDITOR)	£33.95
HISOFT PASCAL 80	£33.95
HISOFT DEVPAC 80 (VER 2)	£33.95
NEVADA COBOL	£33.95
THE KNIFE	£18.95

### GENERAL & UTILITIES

AUDIO TUTORIALS	£8.95
CAXTON TOUCH & GO	£18.95
COMPANION	£17.95
IANKEY CRASH TYPING	£19.95
IANKEY TWO FINGERS	£19.95
LABEL PRINTER	£22.95
MASS EASY LABELLER	£28.95
PLAN IT	£22.95
ROTATE	£19.95
THE FRENCH MISTRESS	£17.95
THE GERMAN MASTER	£17.95
THE ITALIAN TUTOR	£17.95
THE SPANISH TUTOR	£17.95

DON'T SAY  
PCW  
SAY



NABITCHI



PHONE NOW FOR QUICK  
DESPATCH

**MERSEYSIDE INNOVATION CENTRE**  
**131 MOUNT PLEASANT**  
**LIVERPOOL L3 5TF**  
**TEL. 051-708-8775 / 051-708-0123**

ALL PRICES INCLUDE VAT - POSTAGE FREE TO MAIN LAND UK  
PLEASE MAKE CHEQUES PAYABLE TO 'NABITCHI COMPUTING' ACCESS & VISA WELCOME



**NABITCHI Products.**

### Nabitchi Software:-

EXBASIC.....£11.45

If you program in basic on your PCW "EXBASIC" makes your screen come to life. Exbasic adds extra commands to mallard basic like Plot, Draw, Circle, Save screen, Load screen and lots more. There are Thousands of Exbasic user's throughout the world who have benefited from this sensibly priced program. (SEE MALLARD BASIC CAN HAVE GRAPHICS WITHOUT THE PAIN A.P.C. SEPTEMBER 1986)

IT'SBASIC (VOL.1).....£7.95

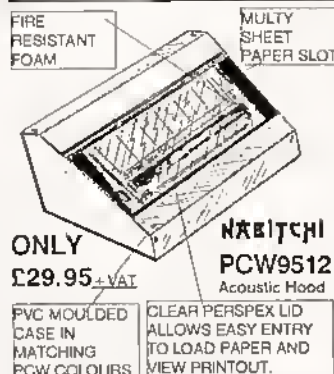
IT'SBASIC is a useful and fun selection of 20 different programs for Adults Only written in basic. Our aim was to give a useful selection of utilities & games which novice and expert programmers could gain from. (Programs are fully listable SEE PIRATES TREASURE FIVE STAR VALUE 8000 PLUS FEBRUARY 1987)

IT'SBASIC (VOL.2).....£7.95

20 more useful & fun programs.  
(A WORTHWHILE BUY VERY GOOD VALUE FOR MONEY YOUR AMSTRAD PCW OCTOBER 1987)

### Nabitchi Hardware:-

**GIVE YOUR EARS  
A BREAK WITH  
THE  
PCW9512  
ACOUSTIC  
PRINTER COVER**



ONLY  
£29.95 + VAT

**NABITCHI**  
**PCW9512**  
Acoustic Hood

PVC MOULDED  
CASE IN  
MATCHING  
PCW COLOURS

CLEAR PERSPEX LID  
ALLOWS EASY ENTRY  
TO LOAD PAPER AND  
VIEW PRINTOUT.

TYPED IT AND LOST IT?

**MEMORY GUARD** PLUGS  
INTO YOUR PCW, WAITING FOR THAT  
FATAL MOMENT WHEN YOU ACCIDENTLY  
TURN THE POWER OFF LOSING THE LOT.  
MEMORY GUARD WILL SUPPLY 45  
MINUTES OF SAFETY FROM ITS RECHARGEABLE BATTERIES. (CHARGER BUILT IN)

ONLY £39.95 + VAT

## PCW HARDWARE

### COMPUTERS

FREE SECURICOR DELIVERY:  
PCW 8256 COMPUTER...£299.00 . . . £343.85  
PCW 8512 COMPUTER...£399.00 . . . £458.85  
PCW 9512 COMPUTER...£499.00 . . . £573.85

### UPGRADES

PCW8256 MEMORY UPGRADE . . . £29.50  
PCW8256 8 DISK DRIVE (FD2) . . . £130.00  
PCW8512 8 DISK DRIVE (FD4) . . . P.O.A  
PCW8256 MEMORY & DRIVE . . . £150.00

### COMPUTER CARE

PCW8256/8512 PAPER GUIDE . . . £12.85  
8256/8512/9512 SCREEN FILTER . . . £17.85  
CPS8256 (RS232 INTERFACE) . . . £54.95  
PCW8256/8512 DUST COVER SET . . . £7.85  
PCW 9512 DUST COVER SET . . . £8.95

### CF2 3" DISKS ONLY £2.75

### COMPUTER RODENTS

AMX MOUSE . . . £73.95  
ELEC. STUDIO LIGHT PEN \* . . . £69.95  
ELEC. STUDIO MOUSE \* . . . £89.95  
\* WITH NEWSDESK INTERNATIONAL  
ELEC. STUDIO VIDEO DIGITIZER . . . £99.95  
GRAFPAD 2 . . . £130.00  
KEMPSTON MOUSE . . . £65.95  
KEMPSTON MOUSE/FLEET ST . . . £115.95  
KEMPSTON M/WRITE HAND MAN . . . £85.95  
PCW8000s PRINTER EXTN LEAD . . . £18.40

### PCW PHONE HOME

AMSTRAD MODEM V21/V23 . . . £89.95  
MIRACLE WS4000 V21/V23 . . . £195.00  
SAGE CHIT CHAT WITH VIEWDATA OR E-MAIL  
INCLUDES MODEM . . . £184.95  
AS ABOVE ALL/SOFTWARE . . . £215.95

### PRINTER RIBBONS

MINIMUM ORDER TWO RIBBONS:  
PCW8256/8512 SEIKOSHA RIBBON . . . £4.75  
PCW8256/8512 MULTI-STRIKE . . . £8.75  
PCW9512 (BLACK) . . . £3.85  
AMSTRAD DMP 2000/2160/3000/3160 . . . £5.75  
AMSTRAD DMP 4000 . . . £7.75

### PRINTERS

FREE SECURICOR DELIVERY:-  
AMSTRAD DMP 2160...£135.00 . . . £155.25  
AMSTRAD DMP 3160...£178.00 . . . £204.70  
AMSTRAD DMP 4000...£315.00 . . . £362.25  
AMSTRAD LO 3500...£340.00 . . . £391.00

### PCW9512 DAISYWHEELS

COURIER 10 . . . £5.80  
PRESTIGE PICA 10 . . . £5.80  
RECTA 10 . . . £5.80  
ORATOR 10 . . . £5.80  
LETTER GOTHIC 10/12 . . . £5.80  
PRESTIGE ELITE 12 . . . £5.80  
SCRIPT 12 . . . £5.80  
MINI GOTHIC 15 . . . £5.80

**BRING THE FAMILY TO SEE US  
AT THE AMSTRAD COMPUTER  
SHOW**

**FEBRUARY 4TH-6TH  
ALEXANDRA PALACE  
LONDON N22**



NewStar Software presents...

# THE CATALOGUE

## Software for PCWs and PCs

It's all in the NewStar Software *Autumn* Catalogue, complete with introductions and explanations to the various subject headings. Information to help you choose, presented in one complete catalogue.

There isn't room in a single advert to show you the comparative merits of the various databases, accounts packages, wordprocessors communications software, or spreadsheets.

**But there certainly is in 48 pages!**



**To order your free copy of the NewStar catalogue  
call (0277) 220573**

New Star Software Ltd., 200 North Service Road, Essex CM14 4SG  
Sales Tel: (0277) 232637 Telex: 995143 NEWSTA G Fax: (0277) 232637  
Mon-Sat 9.00 am to 5.30 pm

The ability to design your own characters is the most exciting part of the latest version of LocoScript 2, version 2.12. On the LocoScript master disc is a file called LOCOCHAR.BAS, which is a BASIC program. Using this program all you do is design the pattern of the character on a grid of dots for high and draft quality print, and for the screen.

The first thing to do is to design your new characters on paper. The screen displays characters on a grid of 8x8 dots, ie. 8 rows by 8 columns; draft quality print is on a 12x9 grid, and high quality on a 24x18 grid. Using a pencil and paper you can draft out your characters on grids until they look about right – you can see the kind of grids that LOCOCHAR works with illustrated on these pages. The grid appears on LOCOCHAR's editing screen much thinner than it actually prints out.

When designing your 8x8 screen character you can put a dot anywhere you like on the grid. However, there are two restrictions on how you can design *printed* characters: you can't use the rightmost column or the bottom two rows of dots on the printed characters, and also you can't put two dots next to each other in the same row. Even with an apparent space between them, two dots in the same row will overlap slightly on the final printout.

Obviously the screen representation of a character, with its limited detail, will only be a rough approximation to your meticulously designed high quality pattern.

## Down to business

Having designed the characters you can start work on modifying LocoScript's character set as you intend. You'll need a disc with LOCOCHAR.BAS, MATRIX.PRI, LOCOCHAR.2 and LOCOCHAR.3, and plenty of space (at least 16k) on it. All these files are on the LocoScript 2.12 master disc, so it's easiest to make up this work disc by formatting a new disc in LocoScript and using the [I8] 'Options' menu to 'Show hidden files' in order to copy MATRIX.PRI and the others onto it.

Reset the PCW with [SHIFT]+[EXTRA]+[EXIT], insert the CP/M disc and at the A> prompt type BASIC[RETURN]. At the 'Ok' prompt, put your LOCOCHAR work disc in and type RUN "LOCOCHAR"[RETURN].

The first piece of information you are asked for is the name of the file you're using as a base to alter, which will be MATRIX.PRI the first time. You are then asked for the name

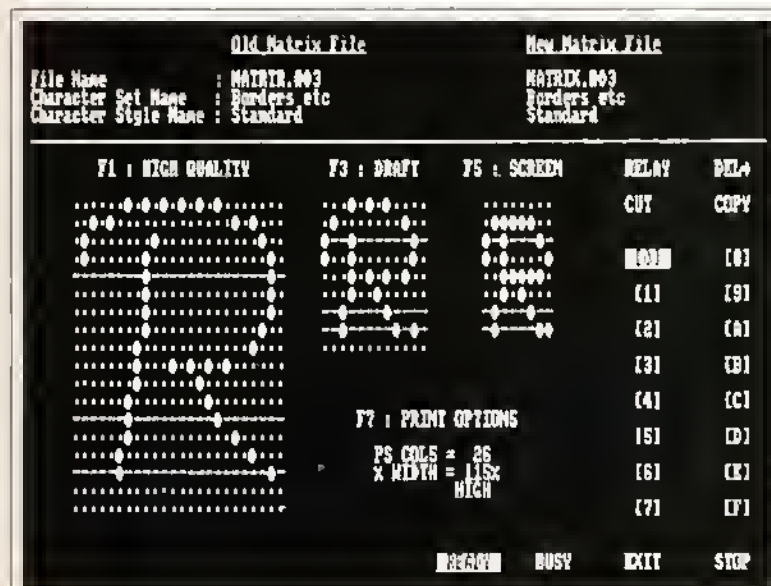
# CHARACTER BUILDING

At last LocoScript can print any character you want. Rob Ainsley investigates.

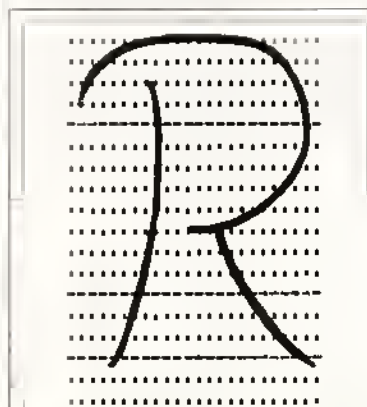
In the old days of LocoScript 1 everyone said, "If only we had Polish accents LocoScript would be perfect." Now we've got LocoScript 2 with Polish accents the complaints have shifted: "If only we had Chinese...", "If only we had Bengali..." Plainly, despite the massive range of characters LocoScript 2 can print, it can never please all of the people all of the time. To this end Locomotive Software have developed a LocoScript utility, distributed with all version of LocoScript 2 from now on, to let you design your own characters no matter how outlandish your particular requirements.

of the altered character set, which can be anything you like – so long as it's MATRIX followed by a dot, a hash sign (#) and two numbers or letters, eg. MATRIX.#01. Alternatively you can call the altered file MATRIX.PRI. In which case LocoScript will use it to replace the old standard set – convenient because it'll be automatically used whenever Loco starts up. The disadvantage is that you can't recover your previous version of MATRIX.PRI, though of course you can copy the original from your master disc.

After a short delay the design process starts. You'll see 'Non-standard' as the name of the set (MATRIX.PRI is called the 'Standard' character set); this is the name LocoScript will use to identify it when it shows you menus for selecting sets.



▲ The character editing screen in LOCOCHAR



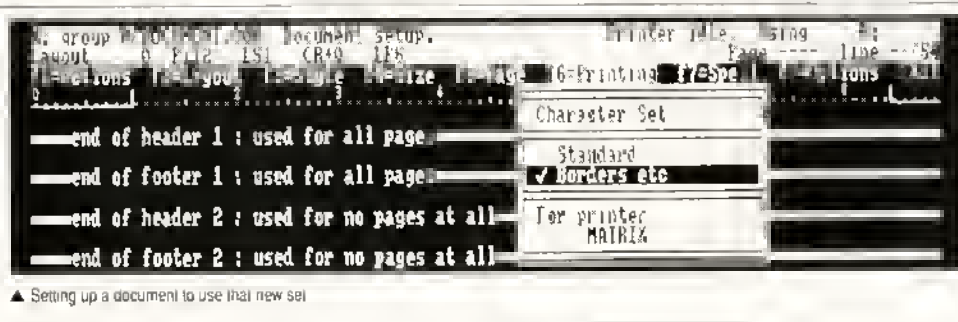
▲ Drafting out your character



straight into your document and get your special characters just by pressing the appropriate keys – as listed in the box.

If your modified set was called, say, MATRIX.#01 you have to explicitly tell LocoScript it is there – you only need to do this once, the first time you use the new character set. When the disc management screen appears, press [F6] "Settings" and move the cursor onto "Write SETTINGS.STD". Press [ENTER], then [EXIT] from that menu and accept the offer to "Write SETTINGS.STD to disc in A". What this does is store in LocoScript's memory the fact that all your new character sets are available for use later on in a document, or on the printer. On startup next time, they will be recognised as available sets without you having to do anything special.

Note that you can't make any old MATRIX.#?? life into a MATRIX.PRI (so that it is automatically used on start-up)



## The sweet sixteen

The redetainable LOCOCHAR characters [0] to [F] are normally the following symbols, obtained in LocoScript by the respective key sequences:

[0] - [EXTRA]+0	[B] - " - [ALT]+[SHIFT]+6
[1] - [EXTRA]+1	[C] - " - [ALT]+2
(etc.)	[O] - " - [ALT]+[SHIFT]+2
[9] - [EXTRA]+9	[E] - " - [ALT]+[SHIFT]+5
[A] - " - [ALT]+6	[F] - " - [ALT]+[SHIFT]+#

## Getting 2.12

As usual, if you have a version of LocoScript 2 before v2.12 you can upgrade to the latest version (which includes the LOCOCHAR character designer and instructions for its use) by sending your old master disc plus £5 to Locomotive at Allen Court, Dorking, Surrey RH4 1YL



without further effort. Italics and bold are worked out by LocoScript from the high quality or draft quality patterns you devised, the first by slanting (strictly 'shearing') the normal pattern, the second by effectively doubling the width of each blob. Double pitch is obtained by stretching out the pattern, and subscripts and superscripts by squashing the draft pattern up. Even in NLO, LocoScript uses the draft patterns you designed for 15 and 17 pitch, and their double width, italic and bold variants – so, if you want your characters to be available in the full range of sizes, you'll have to produce 'draft' versions even if the output will be high quality.

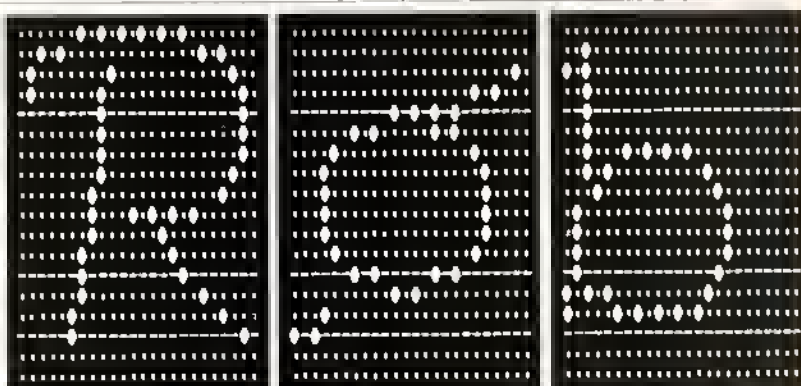
EXIT

either by renaming it or by using LOCOCHAR on it – you can only make a new MATRIX.PRI from an original standard MATRIX.PRI using LOCOCHAR.

Now you are at last ready to actually use the new characters, so create or edit the document you want. To make Loco use a certain set in that document, while editing hit [F1] for "Actions" and pick "Document setup". on the [F6] for "Printing" menu select "Character set" (which will probably be on "Standard") and with the cursor over the set you require press [+]. When you go back to the document itself, your new characters are available just like any others.

Whenever you create a document, the character set used in the group's TEMPLATE.STD is used, so if you have a set you want to use regularly make sure you edit the TEMPLATE.STD and change the character set as just described. When you print you'll be asked if you want to "change to character set intended for document", because the printer may expect the standard MATRIX.PRI set.

You can use any of LocoScript's well-loved effects



Save the slog of writing your signature – make it up in chunks in Locochar, and store the whole thing as a phrase in LocoScript

Yours  
Rob

# CANDID CAMEROON

Tony Hicking tells how the PCW is changing the face of expatriate life in Cameroon

**C**ase in Point invites contributions "if you use your PCW for something more than just running LocoScript". Just running LocoScript! I can't imagine how I ever did my job, looked after my personal affairs, or lived overseas without it (plus a little help from CP/M).

I bought my Amstrad after reading about word processing and the PCW 8256 in a magazine which has nothing to do with computers. Up to then I had been hesitating over the sheer complication of choice, specifications, components, compatibility and jargon in the specialised media. (8000 Plus didn't exist then, I hasten to add). This article convinced me that here was a cure for writer's block (and, as I discovered later, cramp) and I ordered one to be air-freighted to Cameroon.

"Why on earth do you need a computer?" Sheila asked. "To keep up with the grandchildren — and anyway there's no VAT on personal exports". Inspired, that, I thought.

It cut no ice. For once the mention of grandchildren failed to melt the frost. "An excuse to bring more work home, you mean". She was in the fast lane all right that day.

I get a stream of people wanting decisions, floating new ideas, reporting disasters, giving weather and crop forecasts. Estate managers from far afield cannot be told to come back another time. Government officials demand statistics. Our financiers come to see how we are spending their money. Reps are constantly wanting to sell us chemicals, fertilisers, spare parts, services, and advertising space.

Above all, trees don't stop growing and crops don't stop needing to be harvested, tapped, plucked or winnowed just because it's the weekend. Homework is thus the order of the day — or rather the night — and it is all down to my Amstrad

that I can now keep up with the work-load and get a decent night's sleep.

The link between all this and my PCW is provided by a microrecorder, as essential a tool for me as a knife is to a rubber tapper. In the evening I transpose into a notebook and index the contents before transferring to disc within such groups as STRATEGY, FINANCE, PERSONEL, MARKETING, COMITEES, etc. (shut up LocoSpell).

Confidential stuff — strategy, policy, political and economic analysis, performance appraisals — is kept on disc away from prying eyes.

## Personal services

An expatriate also needs to be well organised on the personal front. Back home in the UK are family and friends, bank managers (offshore!), investment advisers, insurance brokers, district councils, property managers — and the tax man — to be kept in touch with, as well as building societies, credit card and mail order companies, book clubs, magazine subscriptions, birthdays and anniversaries. It is important to ensure nothing gets forgotten. The modern equivalent of talking drums, the cleft stick or the mail-boat, is the regular courier service, the arrival of which brings bumf needing attention — like inviting your cheques. How is it that bills never go astray, only airline baggage?

The beginning of the partnership with my Amstrad coincided with the launch of 8000 Plus. Of all the listings published during the past twelve months, two have repaid the effort and eye strain. The one with the greatest practical value for me, and I'm sure for many others, is the word counter WRDCOUNT, the continued absence of which from LocoScript is an aberration. I beg you, Locomotive, put us out of our misery and tell us you are working on it!

That apart, in my view the LocoScript 1 manual was more sinned against than sinning. It took you through a detailed, step by step understanding before revealing the short-cuts. The sinking-in of the detail was admittedly time-consuming and traumatic, but it even I could tame the jungle of headers and footers, page numbering, blocks and phrases then it can't have been that bad. Maybe being used to pioneering virgin forest gave me an edge, although I have still to master the art of tearing a strip off continuous stationery.

Only once have I been caught out through not saving at regular intervals. I pressed the wrong key and gave myself an extra four hours work. But it's not always your fault; in the tropics it can be a race against time, especially during the rainy season. The electricity supply has a habit of cutting and running before a storm, so at the first hint of thunder, or when the lightning starts to flicker, you FINISH EDIT and go and do something else, like making sure your buckets are placed beneath the holes in the roof, and then pulling the sheets over your head and blocking your ears.

## CP/M safari

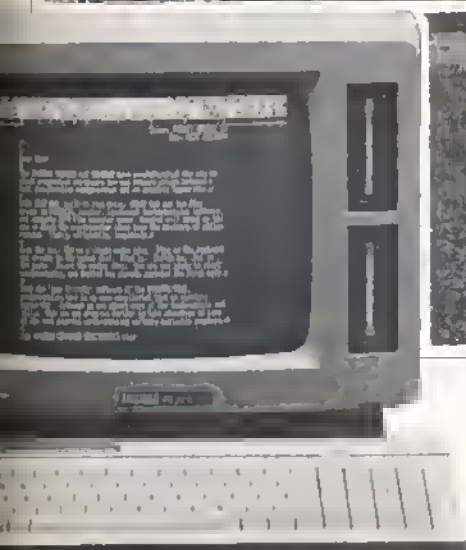
The first use I wanted to make of CP/M was to computerise my personal accounts. I have always kept them in detail, budgeting income and expenditure, and forecasting cash flow. The prospect of being able to dispense with ledgers



## Out of this world

I am on secondment to a plantation corporation in Cameroon comprising 100,000 acres of rubber, oil palms, tea, bananas, coconuts and pepper. There are 16,000 employees, all provided with housing, clinics and village aid posts. We have twenty-two estates, two palm oil mills, eight rubber and three tea factories, a thousand vehicles, plus heavy plant for land-clearance and road-making.

We do our own metal fabrication, heavy and light engineering, civil and electrical works and water supply, and generate our own electricity. We operate a printing press, a sawmill, a motor transport garage, a telephone exchange, a radio network, railways, schools, community centres, and a golf club. And apart from mine there's not another micro anywhere.



As for leisure, the golf club plays a big part although with the handicapping system already computerised, you can't escape the statistical. Further scope exists, however, for membership lists, subscriptions and bar accounts – God help us! Colossus 4 Bridge, Cyrus II Chess, and Tomahawk provide the in-house relaxation. In nine months of using Tomahawk I have never succeeded in making a proper landing. Even so it has given me a better appreciation of our aerial crop-spraying budgets. If my problems are anything to go by, no wonder pilots come expensive.

Bridge is widely popular in expatriate communities, though it is not always easy to get a four together. Now that we've got the PCW to make up numbers, keeping our hand in is no longer a problem.

With the Chess program I have set myself the objective of beating the computer three times at each level, including playing black at least once, before going on to the next. I do wish, though, that my opponent wouldn't beep so gleefully every time it makes a move. Chess is my way of warming up for the five-year strategy review.

### The biorhythm method

In the developing countries there can be no real progress without the first priority being that of its nationals. The prerequisites are high standards set for the initial selection and recruitment of management, a structured training policy, and continuous performance-appraisal against work programmes. By these means people are stretched and enabled to demonstrate their potential. This, in turn, opens up career paths and thus identifies further training and development needs.

In this context my Amstrad and I have discovered what we think could be a new tool in the second of the listings I mentioned earlier – the biorhythms calculator.

I am using it to help analyse the performance of selected managers by relating peaks and troughs to their individual cycles. Already there is a pattern, but six months is too short a time-scale on which to base any conclusions. Also, whether or not this is a realistic approach depends on whether biorhythms have any validity anyway.

I am also testing it on myself to see when I can expect to be at a particular peak. For example would it be better if, rather than dealing with major issues (intellectual), I were to be paying more attention to my wife (emotional), or hacking round the golf course (physical)? These three elements have never yet reached 100% at one and the same time cycle. I wonder if it is really possible to be a sports star, a great lover, and a genius all at once?

We went on leave for a couple of months recently. As soon as we boarded the plane in Douala I knew there was something missing. Forty eight hours after landing at Gatwick the Tandy organisation was better off by £399 (+VAT, damn it!)

Can I have a portable next time, please Mr Sugar?

EXIT

### Critical matter

Everyone knows the good old biorhythm theory – you've got Intellectual, Emotional and Physical cycles ticking away, going from -100 to +100, each with a different period. The worst times are not when you hit -100, but on the 'critical day' at zero, when the cycle switches between positive and negative values.

and files, the chore of postings and the monthly writing-up, attracted me. Until I saw Money Manager from Connect Systems only commercial accounting seemed to exist for the software houses. (Doesn't everybody manage their money?) My accounts are now all on it and kept up to date – tax man please note. No longer is it a chore, and to tell the truth I look forward to paying bills to give me an excuse to start it up.

SuperCalc 2 handles commodity-price tables, calculates export proceeds, and assists in preparing estimates. Another program keeps my investments up to date, or as up to date as possible since the Financial Times takes two weeks to get here, even by airmail; it's too expensive by courier.

Public libraries are few and far between so we borrow and lend among ourselves – books, records, videotapes – all things which people accumulate in overseas communities. Even where there is an Alliance Française, Goethe Institute or British Council we all become amateur librarians and archivists. Lists are circulated and get dog-eared. They need to be updated when people return from leave with the latest novel or video. DataGem (DataStore's earlier incarnation) now handles all this for me as well as our personal address book and the Corporation's internal phone directories.

Write Hand Man – the all-purpose electronic notepad, diary, calculator etc. – is the one program I have abandoned. Apart from its incomprehensibility I cannot see the point of it for home use. Surely, even in the UK, nobody stays at home in front of the computer all day long. Or am I out of touch?

## Are you a case?

Has your PCW revolutionised your life? Traumatized it? 'Case in Point' is a regular feature of 8000 Plus and we are looking for readers with interesting experiences to relate. If you use your PCW for something more than just LocoScript, why not share your thoughts with a waiting world?

Try to keep things light but specific with a

smattering of hard facts about the packages you use. If you've had a bad time with some software don't be afraid to sound off – you could be saving other reader weeks of agony.

We are looking for articles of not more than 2000 words, for which we will pay our usual generous rates. Write to *Case in Point*, 8000 Plus, 4 Queen Street, Bath BA1 1EJ.

**BBD**  
DUST  
COVERS

## GET SMART

**BBD**  
DUST  
COVERS

### Protect Your Computing Equipment With BBD PROFESSIONAL DUST COVERS

- In today's economic climate where equipment failure costs time and money protecting your hardware from wear and tear is the smart thing to do and the smart way to do it is with dust covers from the BBD Professional Range.
- Manufactured from top quality washable nylon and attractively finished with contrasting piping BBD covers are simply the smartest protective covers available.
- BBD covers can be washed and ironed without fear of fading or shrinking and will never crack or lose their shape.
- With all these superlative features you might expect BBD covers to be a little expensive. Nothing could be further from the truth.

**AMSTRAD PCW 8256/8512 : £11.95**

In light grey with green piping. 3 piece set

**AMSTRAD PCW 9512 : £13.95**

In ivory with green piping. 3 piece set

- BBD also offer a wide range of matching covers for the printers from only £5.00.
- These include Amstrad DMP 2000, 3000 and 3160, Amstrad DMP 4000 and LQ3500, and a selection from Brother, Canon, Citizen, Epson, Star etc. etc. Generally covers for 80 column printers are £5.00 and for 132 column £6.00

### GET SMART! GET BBD!

#### BBD DUST COVERS

The Standish Centre,

Cross Street, Standish, Wigan WN6 0HQ

Telephone: 0257 422968 Ext.32 Fax: 0257 423909

DEALER ENQUIRIES WELCOME



## Amstrad Training – £29.95!

With so many organisations trying to sell you on their training courses, you need to be selective. And if price is important too, the choice is simple – you need Reel-Time.

No other training course can offer: personal tuition; disk-based tutorials; a full set of course notes on disk; and a wealth of practical extras, all for just £29.95+VAT.

Best of all, your Reel-Time course is delivered to you pre-recorded on audio-cassette and disk. The whole course is yours to run on your own computer, at your own pace, and repeat whenever you like.



**PC range:** • Amstrad PC (1512 & 1640); • IBM/Comps (PC/XT/AT); • SuperCalc (for 3 & 4); • dBase II; • WordStar 13.3; • Desktop Publishing;  
**PCW range:** • Amstrad PCW 9512 I & II; • LocoScript II; • LocoScript (PCW 8256); • The PCW Computer (for 8256); • SuperCalc 2; • dBase II; • WordStar Professional 13.3; • NewWord 2.

### Call today – Learn tomorrow!

P O Box 22  
HEREFORD  
HR4 8UW

Ask for a full list of our  
courses for IBM/Amstrad  
computers and software.

Telephone:  
(Orders/enquiries)  
(0602) 603623.

DEALER ENQUIRIES WELCOME

### WORD PROCESSING

Locomail I or II	28.95
Locospell I	28.95
Locospell II	17.95
Locoscript II	17.95
Locoscript II + Locospell II	33.95
Protect	45.95
Pocket Protect	27.95
Prospell	21.95
Tasword	17.95
Taspell or Tasprint	11.95
Tasprint 8000	11.95

### DESKTOP PUBLISHING

The Desktop Publisher	22.95
The Desktop Publisher + Mouse	59.95
Newsdesk International	34.95
Fleet Street Editor Plus	47.95
AMX Stop Press	37.95
AMX Stop Press + Mouse	74.95
AMX Mouse & Software	64.95
AMX Mouse & Interface only	37.95

### DATABASES

Database Manager	21.95
Masterfile 8000	37.95
Cambase	35.95
Cardbox	42.95
Condor	69.95
Nucleus	74.95
Plan It	17.95
Datatore	29.95
dBase II	77.95
Dataflow 3/Mailflow 3	37.95
Sage Magic Filer	50.95
Sage Retrieve	50.95
Delta	69.95

### SPREADSHEETS

Supercalc II	35.95
Scratch Pad	43.95

## AMSTRAD PCW SOFTWARE

### !!! NEW !!!

Mini Office Professional	22.95
Master Scan with Master Paint	67.95
Cracker II Turbo	44.95

PHONE FOR DETAILS ON THE NEW  
AMSTRAD PORTABLES

### ACCOUNTS

Sage	
Super Combo	149.95
Accounts Plus	104.95
Popular Combo	104.95
Popular Accounts	73.95
Invoicing	52.95
Payroll	52.95

If you don't see it – ASK!

**IMPORTANT**  
When comparing prices  
please remember that  
**ALL OUR PRICES  
INCLUDE  
VAT & CARRIAGE**

### EDUCATIONAL

All School Software Titles ..... £12.95

Better Spelling	(Age 9 – Adult)
Magic Maths	(Age 4 – 8)
Maths Mania	(Age 8 – 12)
Physics I	(Age 12 – 16)
Better Maths I	(Age 12 – 16)
Biology I	(Age 12 – 16)
Chemistry I	(Age 12 – 16)

### ENTERTAINMENT

Fairlight	11.95
Starlighter	18.95
Pawn	17.95
Batman	11.95
Strike Force Harrier	14.95
Sorcerer	19.95
Hatch Hikers Guide	18.95
Enchanter	18.95
Deadline	18.95
Ballyhoo	18.95
Tomahawk	14.95
Distractions	14.95
Brian Clough's F/Ball Fortunes	13.95
Moonmist	18.95
Leather Goddesses of Phobos	18.95
3-D Clock Chess	13.95
Bridge Player 2000	13.95

### COMMUNICATIONS

Dialup	67.95
Sage Chit-Chat E Mail	53.95
with Modem	159.95
Sage Chit-Chat Viewdata	53.95
with Modem	159.95
Sage Chit-Chat Combo	74.95
with Modem	199.95



Orders To:  
FREEPOST  
CUPAR  
FIFE KY15 4BR

**COPY COMM SOFTWARE**

TELEPHONE Cupar (0334) 56309 / 56655

TELEX – 76284

FAX (0334) 56306

Offices & Shop:  
95 Bonnygate  
CUPAR  
Fife KY15 4LG

VISA

# WIN AN OFFICE!

Mini Office Professional could be the answer to all your PCW software needs – ten copies are up for grabs in our testing competition.

Is it a database? Is it a spreadsheet? Is it a graph drawer? Is it a word processor? Is it a communications program? No, it's all of these rolled into one integrated package. Database Software's *Mini Office Professional* has caused a stir by offering for £29.95 a set of programs that independently would probably cost you over £200. And they aren't just toys either; each of the component programs in Mini Office has all the features that the average user would need.

Because they are 'integrated', each application works by a similar series of menus and keystrokes, so you don't need to learn five totally different ways of working five programs. In our review last month, we rated Mini Office as 5 out of 5 on 'Range of Features', 'Ease of Use', 'Performance' and 'Value Verdict' – and we wouldn't lie to you, would we?

But just in case £29.95 is still too much for you, 8000 Plus and Database Software are offering ten readers the chance to win a copy of Mini Office Professional free, gratis and for nothing.

## All you have to do is...

One of the features of Mini Office is a way to transfer details from the database directly into the word processor. Using this facility you can make up simple mailshots, adding names and addresses into the right places of a letter.

8000 Plus's little known subsidiary company, the computer dating agency Date-a-Mate, is gearing up for the Valentine's Day rush. Catherine MacPseudonym, the manageress of Date-a-Mate, has a bit of a problem. She has set up a letter in Mini Office's word processor, and she's got her list of clients on Mini Office's database, but she's not sure that the letter skeleton is right for the data.

You've got to tell her what items from the client's personal details should appear in which slots in the final letter. The screen photo shows how the letter looks in Mini Office's word processor. The dimmer words, like D3, are Mini Office's way of saying "print item number 3 from

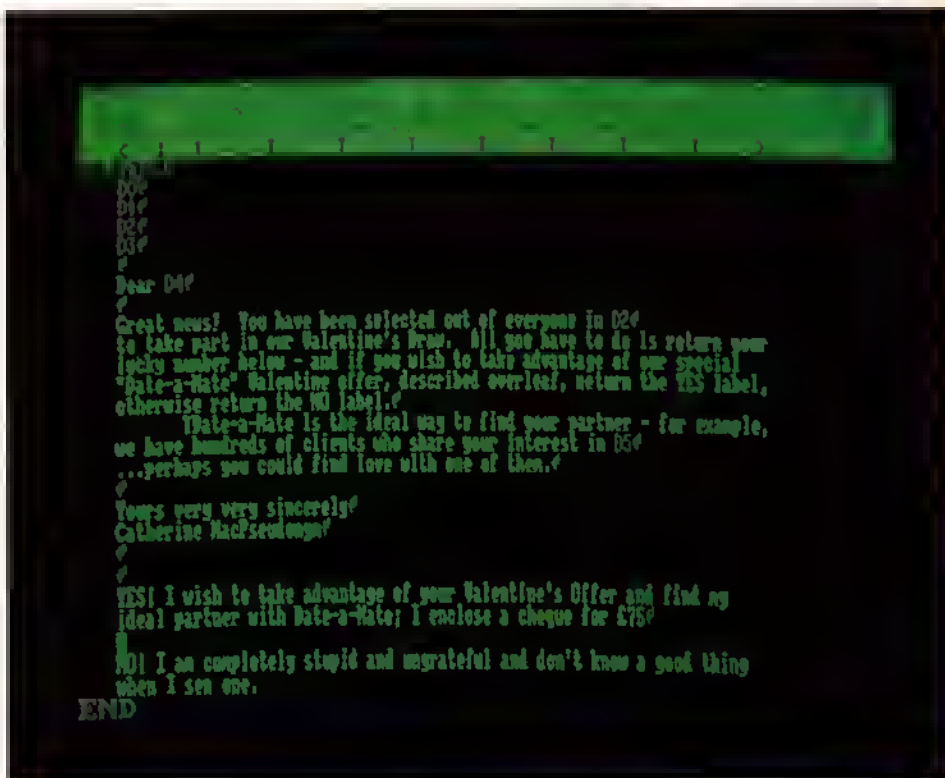
the database here in the letter". Printed below it are all the details that Date-a-Mate holds about one of their clients, labelled A to J.

For example, because D4 is the D-number alter the 'Dear' and 'Merchant Banking' is item J, if you think the letter ought to begin 'Dear Merchant Banking' you would write down 'D4 – J' on your entry. Once you've worked out which items ought to go in slots D0 to D5, write the six pairs of answers down on a postcard or the back of an envelope. There are more items in the

database than are needed in the letter, so not all will be used.

Post your solutions off to *Mini Office Competition*, 8000 Plus, 4 Queen Street, Bath BA1 1EJ. The first ten correct entries drawn on Friday February 26th will win a copy of Mini Office Professional; the results will be announced in the April issue of 8000 Plus.

The standard rules apply – no multiple entries, the editor's decision is final, no correspondence etc.



A: Smith	E: 4 Marie Stopes Way	I: Yes
B: Jane	F: Bath	J: Merchant Banking
C: Miss J.A. Smith	G: Avon	
D: 02/11/52	H: Blue	

COMPETITION!!!

# TYPE IT AGAIN, SAM

Alec Rae discovers how SETKEYS can give you power over your keyboard

## SuperCalc note

SuperCalc users should recognise the obscure collection of commands used here

SE CPALL, E is the sequence of keys you press to print a file out, meaning "Globally turn Borders off, Output in Display form ALL the data to the Printer"

**H**ave you ever tried to work out how much of your life is spent typing the same words or phrases over and over again on your PCW? You would need a computer to work it out. But with a little bit of know-how you can get CP/M to take most of the hard work out of repeating yourself with its clever SETKEYS utility.

This works a bit like the [PASTE] key works in LocoScript. Suppose you are using a program in CP/M – let's say BASIC for argument's sake. When typing in a listing you might find that you were regularly typing and retyping the word 'GOTO'. Or maybe in SuperCalc when printing a file out you keep typing the sequence of keys '/GB/ODALL.P'. You can arrange so that a simple key press will do all this typing for you, maybe [F1] or, as a mnemonic for 'print', [EXTRA]+P.

The first task is to decide on which key to use for the abbreviation. You obviously don't want to choose a simple letter key like 'e' to represent a phrase, for example EPA \* \_BAK, or every time you typed 'e' in a word you would find half your files being deleted.

However there are a number of keys on the keyboard normally unused by CP/M which you can conveniently adapt to your own needs – for instance the function keys [F1] to [F8] and all the vague keys like [UNIT] or [LINE] that are usually only used for LocoScript.

## Token of affection

Most people want to make one key press produce a word or phrase, in which case you need to get to grips with what the manual gaily calls 'expansion tokens'.

In SETKEYS, you don't directly say "key [F1] is to produce the word 'GOTO' from now on". What you have to do is say "key [F1] will produce phrase number #80 from now on, and phrase number #80 will be the word 'GOTO'". The number

associated with a phrase, #80 in this example, is the 'expansion token', and you can have up to 31 expansion tokens numbered from #80 to #9E inclusive (the '#' means it is a hexadecimal number – see the box if you are confused). It follows that you can't define more than 31 different phrases in SETKEYS.

While all 31 tokens are in theory free for use, most of them are already attributed to various keys. It is therefore worthwhile checking that you are not going to accidentally redefine a key that is vital in any program you commonly use. For instance, it is a good idea to steer clear of tokens #80, #89, #8A, #93 and #94, since these respectively define the [STOP] key, the forward and backward [DEL] keys and the cursor left and right keys. Change those and you won't be able to edit command lines in CP/M or BASIC.

The simplest thing is to always use expansion tokens #9B, #9C, #9D and #9E first of all, as these are unused and won't mess up any of the existing keys. A complete list of which expansion tokens are tied to which keys is given on page 112 of the 8000-series CP/M manual, or page 538 of the 9512 manual. For example, looking at that you can see that as long as you don't need the [CUT] key for anything else, you can re-use expansion token #8C safely.

## Putting it on file

All that remains is to put the right commands into a file. This must be an ASCII file so if you don't have a CP/M editor like NewWord or Protext you will either have to get to grips with BASIC's RPED editor (not a too impossible task) or just write the file in LocoScript and then use the 'Make ASCII file (simple text)' command. If you use LocoScript remember that the resulting ASCII file has to be put into group 0 (nearest the left).

For every key to be redefined, you need two lines. One to set up the phrase the expansion token is to produce, and one to tie the key you have chosen to that expansion token. Suppose you want to make the key [F1] produce the CP/M command DIR A: (a bit like the 'Disc Change' command in LocoScript 1).

First you pick the expansion token you want to use – let's pick #9B, the first genuinely free one. Now every key on the keyboard has a code number given on a diagram in the manual which is also reproduced here: the key marked [F1/2] is key number 02, you can see. Type the following two lines into a file called CHANGED.KYS (you can of course use any file name you like – CHANGED.KYS is just an example):

```
E #9B "DIR A:"
02 N "F1" #9B"
```

The first line says 'Expansion token number #9B is the phrase DIR A:' – the line takes the form E (for 'Expansion token'), then the token number, then the phrase in double quotes. The second line says that key number 02 in its Normal state (ie. no [SHIFT]ing, [ALT]ing or anything)

## Getting back again

There are a couple of practical reasons why you shouldn't go mad and try to assign every possible key combination to one of your favourite words however – (1) there is a limited size to SETKEYS's memory (around 750 characters) and if you go beyond the number of characters this can take it will just ignore new settings. (2) you won't be able to remember what and where all the combinations are.

Once you have discovered the joys of SETKEYS you can get going. You could have a suitable SETKEYS file with all the keys set up for short commands in every program you use – BASIC, a spreadsheet, a database and so on.

The problem is of course that once you have redefined your keyboard it can be difficult to get it back to normal without switching off and starting again. 9512 owners are all right since they have a new utility called CPMKEYS.COM which clears everything and allows you to start again if you want – just type CPMKEYS [RETURN] at the A> prompt.

Although this file isn't supplied with the 8000 series machines, it does work fine with them – find a friend with a 9512 and copy it. The only other option for 8256/8512 owners is to look at page 112 of your CP/M manual and write a special SETKEYS file to revert all the keys to the default settings listed there.

produces expansion token number #9B. What this all means is that once it is set up every time you press [f1] the phrase 'DIR A:' will appear on the screen.

To actually tell CP/M to obey these key changes defined in the file CHANGED.KYS, get SETKEYS.COM from your CP/M master disc onto the same disc as CHANGED.KYS, using PIP to copy it if necessary. Then at the CP/M A> prompt type SETKEYS CHANGED.KYS. The disc will whirr for a moment and when the A> prompt returns your key-board is miraculously changed. Instead of producing boring things like "Q your [I1] key will print out DIR A:",

There is one snag. After printing DIR A: it doesn't actually do it — you have to press [RETURN] to make it work. Fortunately you can even save yourself the trouble of pressing [RETURN] at the end by writing E #9B "DIR A: ^M" in CHANGED.KYS instead (the up arrow is [EXTRA]+;). ^M is a special code for [RETURN].

BASIC users might like to produce LOAD " as a standard phrase that could save them hours of typing. The problem is that as soon as you type a ", SETKEYS takes this as being the end of the phrase, so it is difficult to embed this in a phrase. You have to type "LOAD " in the expansion token definition to do this — the ^ tells SETKEYS just to read the following " literally and not to treat it as a command.

It is not just text that you can produce with this method. For instance you can produce escape codes just as easily. Use E #9B ^ [ET] H — the Escape Codes to clear the screen and return the cursor to the top of the screen — in your CHANGED.KYS file and every time you press [I1] the screen clears. For the technical, ^ produces ASCII code 27, or 'Escape', so this expansion token has been set up to produce Escape-E Escape-H, ie. the PCW's 'Clear Screen' code.

## Just a letter

There are obviously other uses. If, for instance you use é regularly (normally rather cumbersome to achieve) you might want to attribute this to a special key.

There are two differences here. First, because you can't type é normally you have to find its ASCII code, which happens to be 225. You can find all the relevant codes on pages 113-118 of the 8000 series CP/M manual, or pages 547-554 of the 9512 manual. Secondly, because you only want to produce a single character, the é, you don't need to use an expansion token.

This is one case where using an ^-key would not be suitable, and you would probably be far happier to get é by

## A hex on you

An alarming number of computer operations, the expansion token numbering in SETKEYS being one such, expect things to be typed in in 'hexadecimal' or 'hex' for short. To all students of modern maths, this is 'counting in base 16'.

In Hex, the letters A to F are used as the digits 10 to 15 respectively. So to count in hex you go 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, 10, 11, 12... 18, 19, 1A, 1B, 1C, 1D, 1E, 1F, 20, 21... 9E, 9F, A0, A1... FF. Hexadecimal FF

(written #FF) corresponds to 255 in ordinary decimal numbering.

You don't need to understand this to use SETKEYS, but it's interesting (isn't it?). In practical terms, when SETKEYS expects the number of an expansion token between #80 and #9E you can use any of #80, #81, #82... to #89 and then #8A, #8B, #8C, #8D, #8E and #8F, then #90 to #99 and #9A to #9E — a total choice of 31.

pressing [ALT]+E. Now, looking on the keyboard chart the E key is number 58, so add a line to your CHANGED.KYS file which says:

```
58 A " ^225 "
```

Here 58 is the number of the E key, the A that follows stands for [ALT] so that it will only work while the [ALT] key is pressed — ie. pressing E alone will still produce 'e', but [ALT]+E will give 'é'. Finally, the bit in quotes tells SETKEYS to generate ASCII code 225 for [ALT]+E. And that's all you need — no expansion token in this case because it is only a single character.

As has been explained, the 'A' in the above commands makes the SETKEYS definition only work when [ALT] is held down. You could use the letters N, A, E, S or SA at that point in the command if you wanted the definition to work with Normal use (no [SHIFT]ing etc), with [ALT], with [EXTRA], with [SHIFT] or with [SHIFT] and [ALT]. You can combine these, so 58 A E " ^225 " would make the E key produce é if either [ALT] or [EXTRA] were held down.

Things are even simpler if you can type the character in question directly at the keyboard — you don't need to look up the ASCII codes at all. For instance, suppose you want to redefine your QWERTY keyboard to the continental AZERTY standard, you might start by redefining the Q key to produce A. So your file to be given to SETKEYS would start

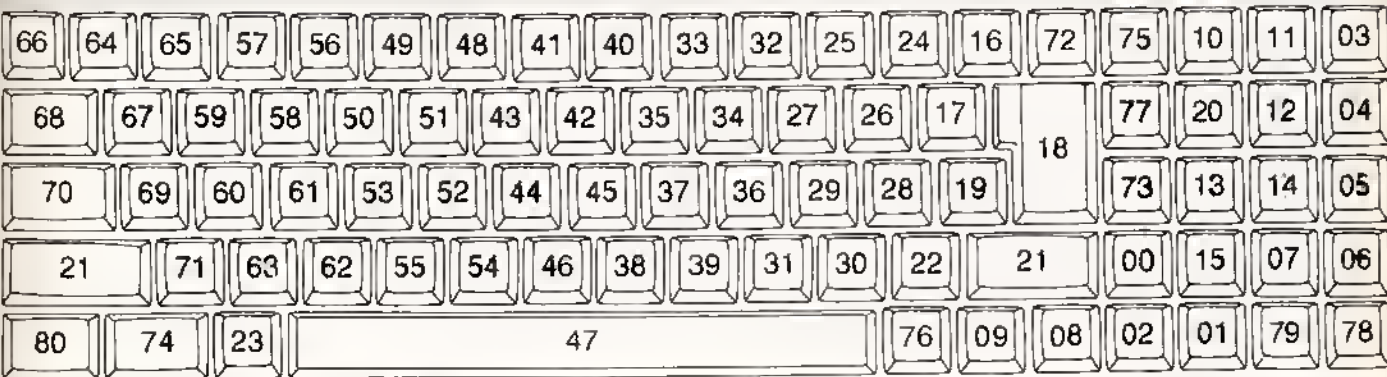
```
67 N "a"
67 S "A"
```

Which means, whenever key no. 67 (the Q) is pressed normally, generate an 'a'. Whenever [SHIFT] and key 67 is pressed, generate a capital 'A'. All you have got to do now is paint over your keytops!

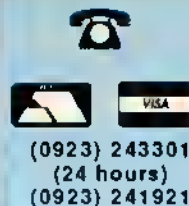
EXIT

## For example

There are two SETKEYS files provided on the CP/M discs which you might want to look at as examples of how things are done. Anyone using programs that use WordStar commands will be interested in KEYS WP (run it by SETKEYS: KES: WP). Logo fans will want to run KEYS DRL to make the Logo editor work.



# RSC Ltd



(0923) 243301  
(24 hours)  
(0923) 241921

## ALL PRICES EXCLUDE VAT

Export, Government & Educational Orders  
Welcome. All enquiries & payments to  
RSC Ltd, 75 Queens Road, Watford  
WD1 2QN  
Telex: 265871 MON REF G. REF CJJ128  
Tel: (0923) 243301-241921

Callers Welcome

All prices subject to change without notice - all goods subject to  
availability  
Carriage Free

### PCW HARDWARE

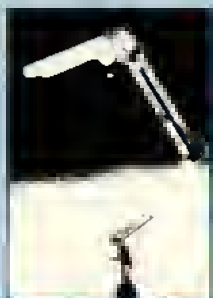
Amstrad PCW 8256 .....	£285.00
Amstrad PCW 8512 .....	£379.00
Amstrad PCW 9512 .....	£474.00
Amstrad RS232/Cent. Interface .....	£49.00
Amstrad FD/2 Second drive .....	£125.00
8256 Memory Upgrade 8512 .....	£24.00

### RSC SPECIAL OFFER FD2+ MEMORY UPGRADE £145

RSC PCW Printer Extension .....	£11.00
(pack includes power extension)	



MODEL RSC L2



MODEL RSC L3

Specially designed by RSC - Two illuminated products for  
the computer operators and general office use.

\* Economical power consumption

\* Localised illumination - less strain on the eyes

\* Can be poised at the angle required.

RSL2 £24 (includes bulb)

RSL3 £19 (includes bulb)

Replacement bulb £3.50

### PCW SOFTWARE - DATABASES

Camsoft Cambase .....	£33.00
Caxton Cardbox .....	£39.00
Caxton Condor I .....	£63.00
Camsoft Delta 1.25 .....	£69.00
Sage Retrieve .....	£45.00
Sage Magic Filer .....	£45.00
Datatore (Digita) .....	£28.00
Supertype (Digita) .....	£17.00
Database Manager (At Last) .....	£19.50
Masterfile 8000 .....	£35.00

### NEW PRICE dBase II £69

### WORDPROCESSING

Micro Pro Pocket Wordstar .....	£31.00
Micro Pro Pocket Wordstar Deluxe .....	£51.00
Tasman Tasword 8000' .....	£17.00
Tasman Tasprint 8000' .....	£11.00
Tasman Taspell 8000' .....	£12.60
Newsstar Neword II .....	£51.00
Arnor Protext .....	£45.00
Arnor Pocket Protext .....	£29.00

### SPREADSHEETS PCW

Amsoft Supercalc 2 .....	£32.60
Newsstar Cracker II .....	£32.60
Scratchpad Plus .....	£42.00

### GRAPHICS PCW

Dr Draw .....	£32.00
Dr Graph .....	£32.00
(Both programs together) .....	£60.00
Electric Studio Mouse Set .....	£95.00
Electric Studio Video Digitiser .....	£80.00

### AMX MOUSE PACKAGE

(with Desktop)

Graphic Front End-Desk Diary  
Telephone Address Book-Memopad  
Desk Accessories all for  
**£60**

### PCW DUST COVERS

Very attractive set. Keep your PCW dust free  
VDU keyboard & Printer £8.65  
(Please specify 8256, 8512 or 9512)

### PCW DESKTOP PUBLISHING

Fleet Street Editor Plus .....	£43.00
Electric Studio - Newsdesk International .....	£33.50
The Database Publisher (Software) .....	£25.00
Database Desktop Publisher (with AMX Mouse) .....	£59.00

### LIGHTPEN WITH NEWSDESK £55

## RSC'S SPECIALS

### Amsoft CF2

Double sided/Single Density  
£20 for box of 10

### Amsoft CF2 DD

D/S Double Density  
£40 for box of 10

### LOCOSCRIPT 2 - £16

### DISC STORAGE BOXES



AMS 20L  
(holds 21 3" disks)  
Perfect Storage  
Box Designed  
and made  
for 3" Disks £10

### RSC 60

Supplied with  
dividers.  
Index labels.  
Lock and 2 keys  
Anti-static £14



### ACCOUNTS PCW

#### Sage Popular Accounts

- Designed for inexperienced users, suitable for cash or credit  
trade. Single program disk, fully automatic sales,  
purchase+nominal ledger, 999 sales+purchase accounts

£65.00

#### Sage Popular Accounts Plus

- All the features of the Accounts program, plus automatic  
invoicing and Stock Recording

£99.00

#### Sage Popular Invoicing

- For the business with higher than average output of invoices.  
Can be used on its own or in conjunction with Sage Popular  
Accounts

£47.00

#### Sage Popular Payroll

- Handles all UK tax codes and N.I. tables

£47.00

#### Sage Popular Combo Pack

- Popular Accounts and Payroll

£99.00

#### Sage Super Combo Pack

- Popular Accounts and Invoicing and Payroll

£155.00

### Map Integrated Accounts

- Sales, Purchase, Nominal Ledgers and Stock Control. Com-  
prehensive Reporting of Debtors, Creditors, Invoicing State-  
ments, V.A.T. calculation, Profit and Loss Accounts and Balance  
Sheet

£99.00

Camsoft Stock Control .....	£38.00
Camsoft Sales Ledger .....	£38.00
Camsoft Purchase Ledger .....	£38.00
Camsoft Nominal Ledger .....	£38.00
Camsoft Invoicing System .....	£38.00
PSPN-Sales, Purchase and Nominal .....	£69.00
PSIS-Stock, Invoicing and Sales .....	£69.00
PSIL-Stock, Inv. Sales, Purch & Nom .....	£98.00
Money Manager Plus .....	£29.00

### PCW COMMUNICATIONS

#### MODEMS

#### Amstrad V21/V23

(manual modem) .....

£85.00

#### Linnet V21/V23

- Auto dialling and answering

- Hayes compatibility

- 32 names/Number/Store

- 3 Help Menus - Best value .....

£129.00

#### WS4000 (Miracle Tech)

- Auto-Hayes - standard .....

£156.00

#### Sage Chit-Chat Software

Sage Combo (Chitchat + Linnet Modem) .....

£182

Sage Chit Chat software .....

£78

Dialup communications software .....

£65

## Mini Office PROFESSIONAL



This phenomenally successful package now  
comes to the Amstrad PCW - with many new  
features

Mini Office II consists of FIVE separate programs

- Wordprocessors
- Database (with label printer)
- Spreadsheet
- Graphics
- Communications

...and you can swap data between different  
programs to produce powerful results

It this  
for only  
£20



With MasterScan you  
can reproduce any  
picture on your PCW  
screen - and print it  
out as often as you  
like £55

Incorporate graphics into packages as The  
Desktop Publisher, Fleet Street Editor Plus and  
Newsdesk. Send Scanned images via modem to  
other PCW's anywhere

## Master PAINT

As well as creating drawings from scratch  
you can load in scanned images from Mas-  
terScan and manipulate them using any of  
MasterPaint's versatile tools. Then you can  
remove superfluous detail, fine tune the  
drawings using the zoom feature, and add  
text £15



MasterScan  
and  
MasterPaint  
£60

## PCW GENERAL & UTILITIES

Locomail (please specify for Locoscript 1 or 2)	£26.00
Locospell (please specify for Locoscript 1 or 2)	£26.00
Mass Easy Labeller	£28.00
Caxton Brainstorm	£33.00
Rotate	£17.00
Plan It	£18.00
Companion	£16.00
Digital Pascal/MT+	£35.00
Digital C Basic Compiler	£35.00
Tas Sign	£20.00
Caxton Touch 'n' Go	£17.00
lankey Crash Typing	£17.00
lankey Two Fingers	£17.00
Prospell	£20.00
Arnor C	£40.00
Arnor Maxam	£40.00

## DIGITA INTERNATIONAL Personal Tax Planner £20 Business Controller £69

## DOT MATRIX PRINTERS

### EPSON

Epson LX800 150 CPS/80COL	£193.00
Epson EX800 300 CPS/50NLQ/80 COL	£374.00
Epson EX1000 300 CPS/50NLQ/136 COL	£499.00
Epson FX800 200 CPS/50NLQ/80 COL	£294.00
Epson FX1000 200 CPS/50NLQ/132 COL	£385.00
Epson LQ2500 136 COL/270CPS/90 NLQ	£690.00
Epson SQ2500 Ink Jet	£970.00

EPSON LQ850	EPSON LQ1050
* 80col 24pin	* 132col 24pin
* 220cps Draft 73cps NLQ	* 220cps Draft 73cps NLQ
* 6K Buffer	* 6K Buffer
* Friction & Tractor	* Friction & Tractor
* 1 & 3 copies	* 1 & 3 copies
* R.S.C. Price £445	* R.S.C. Price £595

Improved paper handling, continuous & cut sheet support at press of a lever/button

### EPSON LQ2500+

The Epson LQ2500+ is a 24 pin letter quality Printer that replaces the LQ2500. Its at 270cps in draft/90 cps in LQ mode — five letter quality fonts plus a lot quicker

**R.S.C. price £725**

## Star

PRINTERS FOR BUSINESS

Star NL10 120cps/30nlq/80col	£189.00
Star NX15 120cps/30nlq/136col	£288.00
Star NB24-10 24pin/216cps/72nlq/80col	£414.00
Star NB24-15 24pin/216cps/72nlq/136col	£518.00
Star NB15 Same as above but 300cps	£595.00

## DAISYWHEEL PRINTERS

Panasonic KX-P3131U 17CPS	£240.00
Micro-P26 — 26CPS	£225.00
Juki 6100 20CPS	£257.00
Juki 6200 30CPS	£417.00

## R.S.C. SCOOP!!



### LIMITED OFFER

JUKI 6100+ Sheetfeeder

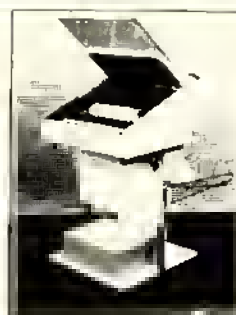
for true compatibility

UK's best selling daisy wheel

**R.S.C. price**

**\* £399 \***

## ACOUSTIC HOOD FOR YOUR 9512 PRINTER



Up to 90% noise reduction—Attractive linen textured finish—Maintenance free—Easy to install—bronze tinted acrylic perspex lid with gas struts for smooth access.  
Available finishes—Black Ash, Magnolia and Light Grey £175 (Hood without trolley £125).  
For other printers please ring.

## K.D. PRINTER STAND



TPS-25: K.D. Printer stand for 80 column printers. Paper leads from underneath and the dial adjustable paper lead plate guides the paper onto the collection rack for neat stacking. Sturdy steel and plastic construction with space saving design.  
£30.00 80 COL  
£37.00 132 COL

## EPSON G03500 LASER PRINTER

6 page per minute/7 res fonts  
Hp Laser Jet compatibility  
**£1345**

(maintenance available)

Canon Laser LBP-8 Mark II	£1795.00
Hewlett Packard Laser Jet Series II	£1945.00
Brother HLB-8 pages per minute	£1750.00

## KEYBOARD STORAGE DRAWER



KD21: Keyboard storage drawer. Steel and plastic construction. PC keyboard locates in the tray and can be slid out of sight when not in use, saves space on your desk and protects from dirt and dust. CPU and monitor can stack on top  
£35

## PRINTER PAPER

2000 Sheets 11x9.5 — 60gsm (fan)	£15.00
2000 Sheets 11x9.5 — 80gsm (fan)	£18.00
2000 Sheets A4 — 70gsm (fan)	£22.00
1000 Sheets A4 — 90gsm (fan)	£15.00
2000 Sheets 11x14.5 Ruled (fan)	£22.00
2000 Sheets 11x14.5 Plain (fan)	£22.00
1000 Adhesive Labels 1 across	£6.00
2000 Adhesive Labels 2 across	£8.65

## PCW RIBBONS (min order 2's)

QT2	QT5	QT10 (or more)
£4.30 each	£3.90 each	£3.50 each

PCW Multistrike Ribbons	£6.00
PCW Colour Ribbons (Blue, Brown, Red, Green)	£6.00

Ribbons for other Printers

## PCW 9512 RIBBONS

QT2	QT5	QT10 (or more)
£3.35 each	£3.15 each	£3.00 each

FOR DAISYWHEEL PRINTER ONLY

## PCW 9512 DAISYWHEELS

### AVAILABLE TYPE STYLES

Product Code	Typeface
Courier 10	Prestige Pica 10
Recta 10	Orator 10
Letter Gothic 10/12	Prestige Elite 12
Script 12	Mini Gothic 15
Each £4.95	

### COPY HOLDER

What every work station ought to have. No more looking down — or finding important drafts. Takes very small amount of space and can be positioned at almost any angle.  
**TREAT YOURSELF £17.00**



### MOUSE MAT £5.00

Thingl (Copy Holder) £7.00

## LEISURE SOFTWARE

Hitchhikers Guide to the Galaxy	£18.00
Leather Goddesses	£18.00
Suspended	£18.00
Cyrus Chess	£12.00
Bridge Player	£15.00
Colossus 4 Chess	£14.00
Batman	£11.50
Lord of the Rings	£15.00
Tomahawk	£14.00
Scrabble	£15.00
The Pawn	£18.00
Trivial Pursuits	£15.00
Graham Gooch Test Cricket	£15.00
Head over Heels	£12.00
Starglider	£18.00
Leaderboard	£15.00
Silicon Dreams	£15.00
Ballyhoo (Infocom)	£17.00
The Fourth Protocol	£12.00
Ace	£15.00
Strike Force Harrier	£15.00
Steve Davis Snooker	£12.00
PSI.5 Trading Company	£15.00

## 4 WAY MAINS DISTRIBUTION SOCKET



Don't trip over — Ideal tidying unit £12

Above unit with built in Arrester — to give protection from mainsborne spikes and surges £17

## AMSTRAD

OMP4000 136 col—200cps F/T 50 NLQ	£275.00
OMP3160 80 col—160cps F/T NLQ	£169.00
Amstrad LQ3500 24pin	£319.00

# Panasonic

Panasonic KX-P1081 80col, 120cps + 24cps NLQ	£149.00
Panasonic KX-P1592 132col, 180cps + 38cps NLQ	£365.00
Panasonic KX-P1595 136col, 240cps + 51cps NLQ	£485.00
Panasonic KX-P1082 col, 160cps + NLQ	£199.00

# WHAT HO, JEEVES!

A mouse seems to be the essential PCW add-on these days. Rob Ainsley looks at Kempston's offering with its desktop organiser.



## KEMPSTON MOUSE & JEEVES

£79.95 • Kempston (0908 690018)

### • All PCWs

PCW owners whose desks are littered with memos, notes, phone messages and addresses scribbled on the backs of envelopes, not to mention reams of continuous paper and a clutter of manuals, might wonder what happened to the paperless office. Like its literary namesake, Jeeves is your right-hand man, doing all that bothersome paperwork for you, but staying discreetly out of sight when not needed.

A desktop organiser is a program combining the functions of a notepad, a calculator, an address and phone book, and a clock; the 'memory resident' description that Jeeves affords itself means the program sits in the PCW's M drive while you run other programs. So, if you're in the middle of working through your SuperCalc spreadsheet and you have a brainwave, you can call up the notepad at the click of a button, record the details, and click back to your spreadsheet. The only bit of paper you ever need for Jeeves is the credit card slip when you buy it.

A WIMP environment is another of those wacky acronyms so beloved of computer folk. It stands for "Windows, Icons, Menus and Pointers", it goes with a mouse – a box with a trackball underneath which you roll around a desk top to control a pointer's position on the screen. When you call up Jeeves, a window appears in the lower half of the screen with all the programs on the disc represented by icons – little stylised mnemonic pictures.

In Jeeves, you use your mouse to move the pointer around the window and 'pick up' one of the tile icons by clicking a button on the mouse. You can then copy the file, for example, by dragging it on top of the icon for

another disc drive, or erase it by dragging it into a bin icon. It's a lot more intuitive than typing in commands like `A>PIP A:=B:J14CPM3.EMS`. Clicking on the icons for the calculator, phone book, calendar and so on brings up another window in the top left hand corner with the function selected; clicking both buttons on the mouse takes you back to the main window. All this time the clock runs constantly on the bottom line of the screen.

## Don't believe everything you read

The first problem with Jeeves is making up your self-start disc; despite the fact that you've probably bought it to avoid CP/M as much as anything else, you still have to type the CP/M commands `CLOCK`, `JEEVES M:ON` and `JEEVES.S` every time you run the program. (You can create a `PROFILE.SUB` file to do this for you, if you know how).

These commands set the system clock up then copy Jeeves' work files to the M drive – they take up about 60k of space there, more if you have lots of notes. If you now press both mouse buttons at the same time you can call up Jeeves, getting a list of the files on the A drive disc represented by those icons. You change to another drive (thus replacing CP/M's `DIR`) by clicking on the appropriate drive icon.

At the bottom of the screen are the icons representing the utilities – calculator, notepad, calendar, phone book and clock. On the first, a picture of a calculator appears at the

SuperCalc running a spreadsheet in the background

Jeeves' calculator

File icons



## But will it work?

You can call Jeeves from inside some programs and not others – this is due to the way it uses the PCW's memory which can interfere with the working of some programs. Obviously a comprehensive list is impossible, but some of the more popular packages Jeeves appears to work with are:

Mallard BASIC, DR Logo, SuperCalc2  
DataStore, Cardbox, dBase II  
WordStar, Cracker  
Sage Accounts

Apart from LocoScript, the following CP/M programs will just crash or not work properly if you try to run them with Jeeves installed:

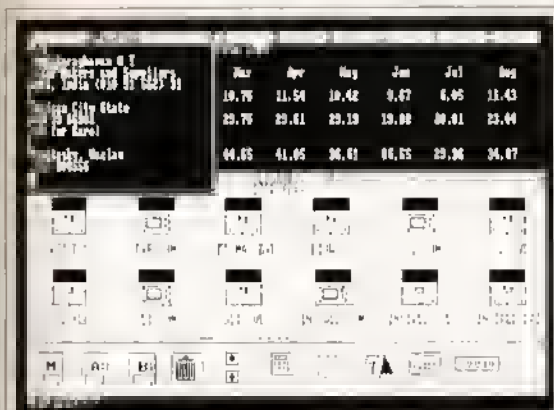
Protext  
Masterfile 8000  
AtLast (Database Manager)  
Mini Office Professional  
Digita Business Controller  
Newsdesk International  
Fleet Street Editor  
Desktop Publisher

Dustbin – trash files in here

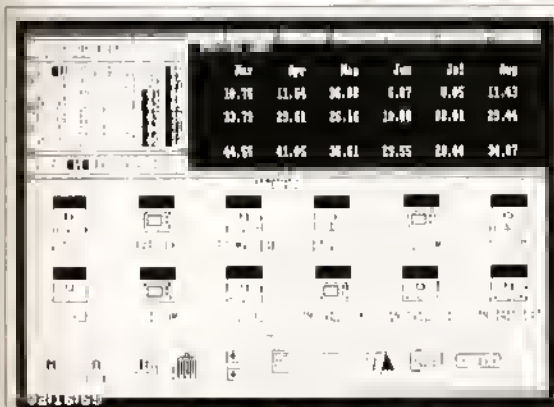
Move icons to see more of directory

Icons for 1 calculator, 2 notepad,

3 calendar, 4 phonebook and 5 clock



▲ Consulting the phone book



▲ Checking how many shopping days left to the 14th

top left of the screen and clicking on the buttons simulates a key press. The notepad shows up as a window in the top left corner and has an unlimited number of pages on which you can record messages and ideas. The contents of a notebook, NOTEBOOK.DAT, can be used in LocoScript by using the 'Insert Text' facility to put it into another document. The phone book is similar but each page is headed with two letters of the alphabet with three pages for each pair of letters.

The calendar is possibly the most useful function and will show any month for any year between 1978 and 2000. You click on the displayed month or year to change it (one button takes you forward, the other back). There's also a clock on the calendar display showing you today's date too (though you have to set that yourself the first time you use the calendar function each day).

## Two things at once

To run any program, you click twice on the appropriate .COM file - for example, to run BASIC you double-click on BASIC.COM. You are always returned to the A> prompt to be asked if you need to type any more on the command line (eg. RPED if you want to run the RPED editor). Pressing [RETURN] starts the program up. This can get irritating after a while if your programs don't need extra command line items.

BASIC, or whatever, then starts as normal, but you can call up Jeeves any time you want. The clock runs continuously on the very bottom line of the screen, unless you turn it off explicitly in Jeeves. You can't run one program while you're inside another, but you can copy or delete files in the middle of running a program, which could be very useful if you want to make space on a disc for the 25k program you're working on.

## Programmers' pleasure

The desktop organiser program itself is very pretty, but not the be all and end all of the Kempston system. The mouse will work with most of the popular desktop publishing programs (but not Newsdesk International), so is handy if you need one.

For programmers, Mallard BASIC and DR Logo (and other languages, of course) can read the mouse. The mouse generates an x- and a y- co-ordinate telling you where it is pointing to, and also a variable telling you which of the two buttons are up or down. For example, if you had the following lines as a subroutine in your program then after each call of it you would find x% and y% held the x-

and y-co-ordinates (a number from 0 to 255), leftb% is -1 if the left button only is down, rightb% is -1 if the right button only is down, bothb% is -1 if both buttons are down.

```
500 x%=INP(208):y%=INP(209)
520 button%=INP(212)
530 leftb%=(button%=253)
540 rightb%=(button%=254)
550 bothb%=(button%=252)
560 RETURN
```

The Kempston mouse also comes with a GSX driver so you can use it as an input device to control the cursor position on, for example, DR Graph and DR Draw.

Before you switch off for the night you save all the notes you've made, telephone numbers you've recorded and so on by typing (at the A> prompt, horror!) JEND.S.

## The final word

AMS's desktop - AMX Desktop at £79.99 (4p more!!) - has been around for some time now, so how do they compare? The AMX desktop has better designed desktop utilities, for example your memos can be laid out better, there are drop-down menus, wider variety of functions and the design of the whole thing is more sophisticated. Jeeves' great plus point is that you can run your CP/M programs, SuperCalc or WordStar say, and still call it up and use all the functions from within the program. You can't with AMX. However, see the box for software that will and won't allow Jeeves to work. Also, the mouse with the AMX Desktop can't be used in your own BASIC programs or GSX applications, so for programmers the Kempston mouse is a better buy.

Opinions vary on desktop organisers like this. Cynics point out that a calculator, calendar, cheap digital watch and notepad will work with any program in the world, require no manual, and will cost you about £5 for the lot.

On the other hand, CP/M haters will welcome the opportunity to avoid that A> prompt. The ability to use Jeeves' facilities from within some programs, like file handling as well as the calendar and clock facilities, is very alluring, and after using a desktop and mouse it seems very unsophisticated and old-fashioned to go back to typing in all your commands at the keyboard.

If you're just after a clock or calendar, or want a gimmick, this is an expensive way to indulge. But if you prefer working in a visual, mouse-operated environment rather than CP/M's written command lines, and the software you use is Jeeves-compatible, or you want to write your own mouse-operated programs, you may well think this is good value.

EXIT

## Cursors, foiled again

The current version of Jeeves only works with a mouse, and can't be operated from the keyboard alone; however, such a version is planned. Details from Kempston

### PLUSES

- Visual icon-based system is a more intuitive way of working than CP/M
- Continuous time display is handy
- You can use Jeeves from within many business programs
- Mouse can be used with DTPs and your own BASIC programs

### MINUSES

- Many programs won't work with Jeeves
- You still need to use CP/M to get it going
- Ordinary calculator, notepad, calendar and digital watch will cost you £5 or so.

RANGE OF FEATURES  
EASE OF USE

■■■■■  
■■■■■

PERFORMANCE  
DOCUMENTATION

■■■■■  
■■■■■

8000 PLUS VALUE VERDICT ■■■■■



# tell Joyce if you see her.

ALL PRICES BELOW  
INCLUDE VAT & P/P  
All Digita products are backed  
by 60 days free after sales support  
and with an optional 12 months cover.

## BUSINESS CONTROLLER



**DIGITA**  
INTERNATIONAL

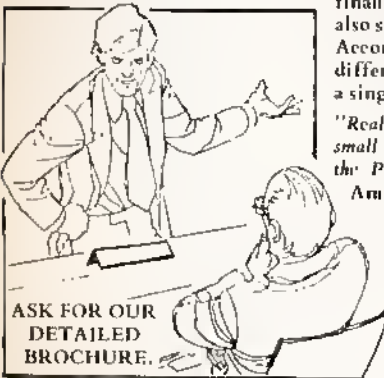
**£99.95 107D**

Amstrad PCW owners appreciate the time-saving, flexibility and professional results using a word-processor. Business Controller offers similar benefits to computerising your accounts. From assisting day-to-day book-keeping, VAT Returns, etc., to complete End of Year accounts if you wish. It is designed for the small to medium sized business, whether a sole trader, partnership or limited company.

In addition to recording UNLIMITED numbers of cash and bank transactions, Business Controller meets legal requirements and will show the full financial state of your business. Furthermore Accounting Ratios are available for those users wishing to closely monitor the performance of their business.

'Accountant's Guide' is a separate booklet provided especially for users who wish to use this program in conjunction with their accountant/financial adviser. The program is also suitable for practising Chartered Accountants, since any number of different Cash Books may be kept on a single Amstrad PCW.

"Real blessing ... an easy way for the small business to do its Book-keeping on the PCW" - Computing with the Amstrad PCW.



ASK FOR OUR  
DETAILED  
BROCHURE.

DEMONSTRATION DISC  
ONLY  
**£2.95**

## ARE YOU SURE YOUR TAXMAN IS DOING HIS JOB CORRECTLY?

Fully menu-driven, this UK income tax computation program will calculate your income tax liability for a given tax year (84/85, 85/86, 86/87, 87/88) and provide the pertinent facts about your tax position. Information, which can be easily saved and amended, can be used to provide useful 'what if' calculations on your tax liability. Guidance notes are provided for users unfamiliar with the operation of the UK tax system and a software update service is available for changes in legislation. This program is also ideal for practising Chartered Accountants, since any number of different clients may be processed on a single Amstrad PCW.

**PERSONAL  
TAX  
PLANNER**

**£24.95 106D**

"an excellent program ... I can unhesitatingly recommend PTP." - Computing with the Amstrad PCW.

**NEW**

## DATASTORE II

**£39.95 101D**

Looking for fast access to stored data? Want to create customised reports, mailing lists for printing labels, office and personal records with NO technical knowledge?

Researched, developed and written exclusively for the Amstrad PCW, Datastore will fully utilise the facilities of your computer.

- \* Menu driven with prompts
  - \* Full tutorial for beginners
  - \* Automatic calculations on entry (useful for VAT, etc.)
  - \* Full mathematics (+, -, X, /, average)
  - \* Lightning search feature - typically under 4 seconds
  - \* Search on any field or any combination of fields for anything
  - \* Optional rubelided string and conditional search facility
  - \* 32,000 records and 32 fields
  - \* 1,498 characters per field
  - \* Numeric, string, date and money fields
  - \* 2 user-definable printing templates
  - \* Facility to change screen layout AFTER entering your data
  - \* Uses RAM disk and 1 or 2 drives (therefore no repetitive disc swapping)
  - \* Cross referencing/nudging between files
- Extra Options with DATASTORE II include:
- \* Option to output to an ASCII file
  - \* Special 'recovery' utility to restore corrupt or deleted data
  - \* Simplified search procedure
  - \* Simplified nudging of files

"... very user friendly ... real value for money" - Amstrad PCW Magazine.

"... Datastore II is a marked improvement on I ... plenty of nice touches ..." - 8000 Plus.

**NEW**

## SUPERTYPE II

**£24.95 103D**

NOW LOCOSCRIPT 2 COMPATIBLE

Perhaps the only reasonable criticism of the Amstrad PCW might be the standard of the printer. Supertype II is a program which will offer you EIGHT new, radically different typesets. Each of them has its own distinctive, professional appeal, giving your documents an original facelift.

Supertype II is unique in that it works directly with LocoScript/LocoMail/LocoSpell/LocoScript 2 and all of your CP/M software. It supports all of the printer 'high quality' modes including: enlarged, bold, emphasized, italic, etc. The ingenious thing about the program is that once you've installed your favourite font on a disc, you won't even notice the program working. You can run your programs in the normal way and everything will be the same except when you print out. Now it is even possible to select fonts from within LocoScript 2.

"... a valuable addition to the PCW's talents ... very simple to use ... learnt in 15 minutes ..." - 8000 Plus.

"We've tried it with LocoScript and we love it" - Official Amstrad User Club.



(0395) 45059

or  
post to:

**Digita International Ltd.**  
Kelsey House, Barns Road, Budleigh Salterton,  
Devon EX9 6HJ, England.

## LOCOSCRIPT 2 & AMSTRAD PCWs

by John Hughes

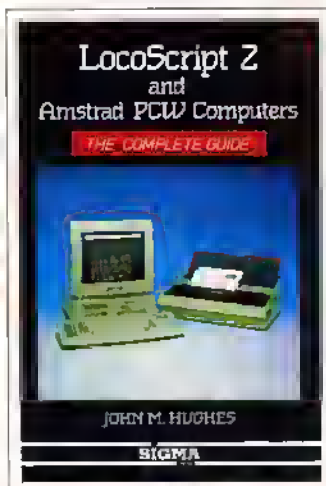
£11.95 ● Sigma Press (Freephone 3477)

Many people are buying the 9512 as a sophisticated typewriter and finding themselves in the computer age. This book takes the 9512 owner from absolute basics of what a computer is through to a thorough explanation of the workings of LocoScript 2, Locomail and Locospell. It also gives a good overview of the world 'beyond LocoScript' – spreadsheets (with a brief description of SuperCalc and similar programs), databases, communications, and so on. It caters for 8000 series LocoScript 2 owners as well, although since it begins from basics much of the information is redundant for anybody already familiar with LocoScript 1.

The whole approach is very much angled towards the office typist turned PCW user and even complete word processing novices should find the whole conversion process made easy by Mr Hughes' gentle step-by-step approach. The text is clear, written in an easy-going style and there are plenty of screen shots to illustrate things.

There are some delightfully picturesque explanations of PCW terminology (how about 'an unformatted disc is like a new car park – before lines are painted in, the cars cannot be parked in an organised way').

Coping with different daisywheels and dot matrix printers is clearly important for 9512 owners, and the section on 'Printwheels and Printers' covers its ground in detail. The LocoMail chapter is



# BOOK LOOK

Fed up with the manual? Try one of the month's new LocoScript tutorials.

good too – clear examples and a rather more direct approach than the official 9512 manual should enable beginners to get merging straight away. It goes on to quite complex mail merging using conditionals (only printing text if a condition is true) and arithmetic, which aren't fully covered in the manual.

The bottom line with any guide like this must be, how does it compare to the LocoScript 2 manual, or 9512 manual, that everyone has anyway? In scope, style and layout, the two are similar; the differences are more of purpose than anything else. The 9512 manual is more of a comprehensive reference work, while this book is possibly better and more readable as an introduction to the idea of wordprocessing with LocoScript 2. (Compare the manual's 600+ pages to the 200+ of Mr Hughes' book). Which you prefer is a matter of taste more than anything else, and often just reading a different approach to a problem makes the whole thing suddenly fall into place. Certainly those who find 'user instructions' daunting would do well to look at *LocoScript 2 & Amstrad PCWs* – it is a friendly, down-to-earth and very readable guide.

**LocoScript 2 & Amstrad PCWs**  
ISBN 1-85058-0879-9  
**8000 PLUS VALUE VERDICT** ■■■■■

## LOCOSCRIPT 2 ON THE PCW

8256/8512 AND 9512 by Ian Sinclair

£9.95 ● Blackwell Scientific (0865 240201)

The title of this book is a little misleading – something like 'LocoScript for the PCW 9512' would have been a better guide to show who'll find the book most useful.

Cover blurbs are not renowned for their objectivity; this one claims the book tells you everything you need to know about LocoScript 2 "which is a very different program to use" to LocoScript 1. Strange then that 90% of the book looks like a manual for the old version, particularly the cover, which shows an 8256 running LocoScript 1. It'll be of limited interest to 8000 owners who are reasonably familiar with version 1; most of it covers basics like cutting, pasting, layouts, templates and so on, and the LocoScript 2-specific parts are of insufficient detail to be particularly useful for understanding that program.

It only covers versions up to 2.06, so there's no mention of LOCOCHAR defining your own characters; nor is there anything on LocoMail or LocoSpell, both of which come bundled with the 9512.

The instructions assume no knowledge of word processing, and to ease office typists into word processing starts from 'Direct Printing' mode. As always in Ian Sinclair's books, the tone is light, easy going and readable, though

some of the example printouts don't appear to have been checked very thoroughly (mis-spellings, inconsistencies between the 'stored' and 'printed' versions of phrases, and so on).

A big minus is that there are no screen shots. There are also one or two irritating references in passing to things not explained any further – for example, it is mentioned without further elaboration that LocoScript 2 is designed to let you print out a series of short documents as if it were one, with the page numbers following on. On the other hand there are some practical guidelines on setting up letter templates, printing labels and working with different paper sizes. There's a useful 'Help' section at the back with one-paragraph reminders of how to change layouts, numbering pages in headers and footers, and so on (though nothing about how to cope with the dreaded 'disc full' situation).

While this is certainly shorter and simpler than the comprehensive and well-written 9512 manual, it's not necessarily better. This isn't a bad book; it just looks a bit too much like yet another bland PCW potboiler.

**LocoScript 2 on the PCW 8256/8512 and...**  
ISBN 0-632-02185-3  
**8000 PLUS VALUE VERDICT** ■■■■■

**LOCOSCRIPT 2**  
ON  
**THE AMSTRAD PCW**  
8256/8512 AND 9512



**IAN SINCLAIR**

# THE ULTIMATE CHOICE FOR AMSTRAD COMPUTER SUPPLIES

TOP QUALITY ★ NO EXTRAS TO PAY ★ BEST PRICES

## ANTI-GLARE VDU SCREEN FILTER



Designed specially for the Amstrad PCW 8256/8512/PCW 9512, also PC 1512/PC 1640 it fixes with the set of Velcro tabs supplied and is easily removed for cleaning.

**ONLY £14.95**

### CONSTRUCTED FROM NEW LEXAN ACRYLIC

Protection for your eyes without demergering your pocket. Do not confuse this product with cheap mesh filters or some of the overpriced glass or acrylic filters available.

(Remember mesh filters clog and are difficult to clean thus you strain your eyes further.)

Research has shown that headaches and fatigue are caused by the eye struggling to focus on fuzzy characters on your VDU screen. The fuzziness is the result of ambient light reflecting from the surface of the screen causing the background to appear cloudy and the characters to be poorly defined.

Our new anti-glare filter eliminates this reflected light thereby improving the contrast between the characters and the background.

## 3" DISK STORAGE BOX



Most problems associated with floppy disks are caused by poor handling and storage. The SBS 3" disk box offers a lot at a low cost. Its tough construction protects your valuable data and the hinged lid pivots back for easy access. It has 4 adjustable index dividers to make it quick and easy to find the disk you need. This super box holds 25 x 3" uncased disks (15 cased) and comes complete with anti-scratch rubber feet, colour identification labels and a free floppy disk pen.

FREE FLOPPY DISK PEN  
WITH EACH BOX

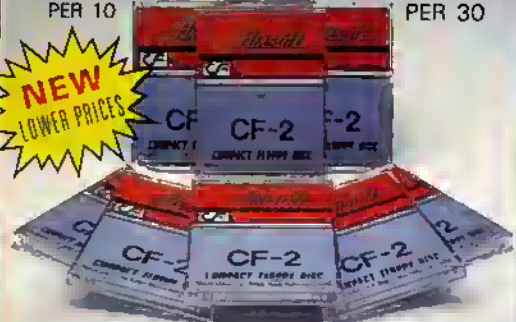
**£10.95**

## AMSOFT 3" CF2 DISKS

**£22.95**  
PER 10

**£67.00**  
PER 30

**NEW**  
LOWER PRICES



40+ P.O.A.

**S.B.S. PRICES INCLUDE VAT & POSTAGE**

- SUITABLE FOR ALL 3" DRIVES INCLUDING 2ND DRIVE ON PCW 8512
- 100% ERROR FREE/LIFETIME WARRANTY
- SUPPLIED IN INDIVIDUAL CASES

## 3" DISK DRIVE HEAD CLEANING KIT



SUITABLE FOR ALL 3" DRIVES

# THE CLEARHEAD

3" DISK DRIVE HEAD CLEANING KIT

Only **£9.95** inc.

Dealers enquiries welcome. Please send A4 SAE for Dealer Pack and Sample. Strictly written enquiries only.

Your disk drive heads constantly pick up harmful contaminants such as dust, cigarette smoke and oxide particles from the disk itself. By regular use of the 'Clear Head' you extend the life of the disk drive and protect your valuable data on the disks. Cleaning should be carried out weekly, or whenever errors occur.

'Clear Head' is simple to use and takes less than 60 seconds to ensure peace of mind.

Remember... prevention is better than cure.

## AMSTRAD PCW PRINTER MAINTENANCE KIT FOR 8256/8512



**NEW**  
PRODUCT

Cleanprint is an innovation in printer maintenance. Printheads require regular cleaning if the quality of print is to remain constant. A build up of dirt and ink can impair legibility and ultimately damage the delicate equipment. Indeed, in the past the cleaning process itself could damage the very equipment it was trying to protect — until now!

The Cleanprint cassette contains an uninked ribbon, impregnated with a specially formulated cleaning solution. By simply replacing the normal inked ribbon with the Cleanprint cassette and running the printer in 'self-test' mode (for approximately 60 lines of full character sets), the printhead will be clean enough to produce a quality of print as if it were new, at the same time safeguarding against costly damage to expensive machinery.

Recommended use for each cassette is 8 cleanings and each kit comes complete with 8 Cleanhand wipes for removing ink from hands and printer casings, along with a Clean-duster aerosol of compressed gas to blow away dirt from inaccessible areas of the printer.

Normal inked ribbon  
Cleanprint ribbon  
after use  
Cleanprint ribbon  
before use



- The Cleanprint cassette will
  - Remove ink deposits
  - Maintain print quality
  - Protect and lubricate the printhead
- Simple to use and each kit comes with accessories to complete the cleaning process.

**ONLY £16.95**

PLEASE SEE ORDER DETAILS OPPOSITE

MEMORY UPGRADE STATIONERY



## PCW 8256 8512 PCW

# SPACE SAVERS



**DESKTOP PRINTER STAND**  
price slashed  
£4.95

Desktop Printer Stand — £4.95  
Monitor Mounting Printer Stand — £9.50  
Monitor Mounting Tray — £15.00  
Transportation Handle — £19.95  
Tray & Printer Stand — £18.49 as a pair.

**Use your PCW to the full**  
**UPGRADE its MEMORY £18.95**  
**8256 SECOND DRIVE**  
inc. all Tools Required £124.95

**CF2 DISCS**  
Plastic Cased  
**£2.40 each £11.95 for 5 £23.49 for 10**  
Send for our **FREE CATALOGUE** packed with  
**UNBEATABLE OFFERS** and useful  
**HINTS & TIPS.**  
All prices include VAT and P&P — U.K.

**MEAC Designs**  
Dept 8p, 5a Harlon Parade, Village Way, Yateley  
Camberley, Surrey, GU17 7SB.  
0252 879005 Anytime

DISC UPGRADE CF2 DISCS

DESK TOP COMPANIONS



## GDDDE SOFTWARE PRESENTS

# QUASAR II

### THE STATISTICAL PACKAGE FOR THE AMSTRAD PCW RANGE

This package is fully integrated with the Amstrad printer and allows the user to choose draft, condensed or high quality output.

1. DATA EDITOR (Uses full screen editor or line editor).
2. ALPHABETIC/NUMERIC SORTER (ascending or descending order).
3. REGRESSION ANALYSIS (up to 10 way). Ordinary Least Squares or instrumental Variables with and without an intercept. Twelve diagnostic statistics are also calculated.
4. MATRIX ARITHMETIC. Inversion, subtraction, addition, multiplication, transportation, eigenvalues (up to order 10).
5. LINEAR PROGRAMMING and TRANSPORTATION PROGRAMMING.
6. PERCENTAGE CHANGE OVER ANY PERIOD, CROSS TABULATION (6 way).
7. DESCRIPTIVE STATISTICS (15 different) and PERCENTILES.
8. FREQUENCY TABLES, HISTOGRAMS, SCATTERGRAMS (Hi-res), AND BAR CHARTS.
9. CORRELATION, MOMENT AND COVARIANCE MATRICES (up to order 8).
10. STATISTICAL TESTS parametric/nonparametric (22 different) Analysis of variance one and two way, t test, Chi-squared test, Kruskal-Wallis test, Mann-Whitney test, Runs test, Sign test, Median test, Friedman test, Wald-Wolfowitz test, Homogeneity of variance test, Trend test, Kolmogorov-Smirnov tests Distribution fitting (binomial, Poisson and Normal) Correlation (Pearson, Spearman, Kendall, Simple).
11. MATHEMATICAL UTILITIES. Solution of simultaneous equations and Quadratic equation solver.
12. DATA TRANSFORMATIONS Single and Double file (19 different)
13. SPECIAL UTILITIES (Backup, Merge, Insert, delete and Create)
14. FORECAST Six forecast equations and 4 extrapolation methods. Fully comprehensive 70 page manual with worked examples.

QUASAR is used by numerous British Universities, Colleges and Hospitals for research, as well as by people in Spain, Portugal, Sweden, Malta, Nigeria, Netherlands, Australia & Holland.

Putting Your Amstrad to work July 1987. "It is invaluable for those who are interested in or need to use statistical packages."

STOP PRESS Amstrad PC & IBM compatible computers. New product Polarix now available. Ring for details.

Ideal for Scientific Analysis, Education, Management or Business Studies etc.

**£22.95** (all inclusive) Cheques P.O to  
**GOODE SOFTWARE**, Dept 8P1, 22 Llandough St, Cathays,  
 Cardiff, S.W. 10 4448

COMPUTER SBS SUPPLIES

# THE ULTIMATE CHOICE FOR AMSTRAD COMPUTER SUPPLIES

## TOP QUALITY ★ NO EXTRAS TO PAY ★ BEST PRICES

DISC UPGRADE CF2 DISCS

### BARGAIN CORNER

ROUST COMPS	
DMP 2000 3000 3160 Printer Covers	£4.89
PC 1512 1640 Full Set	£9.50
DMP 4000 Printer Cover	£5.75
PCW 8256 8512 Full Set	£10.35
PCW 9512 Full Set	£10.51
LQ 3500 Printer Cover	£5.46



### LISTING PAPER

11" x 14" 1pt Min Ruled	£20.35 per 1000
11" x 14" 2pt MCR Plan Ruled	£27.05 per 1000
11" x 9" 1pt 160gsm Plan Ruled	£15.43 per 1000
11" x 9" 2pt NCR Plan	£18.99 per 1000
A4 Continuous 70gsm plain	£14.08 per 1000
A4 Continuous 90gsm plain	£14.95 per 1000

Micro perforated on all edges

### COPY HOLDER



**'THINGI' Copy Holder**

Create more space and reduce VDU operator eye strain. This new holder fastens to the terminal, holds manuscripts at the optimum angle for viewing and can be tidied away when not required. The copyholder fixes to the top of the VDU with velcro strip. State if left or right hand unit required.

**ONLY £6.99 inc.**

### SURGE PLUGS

ELIMINATE DANGEROUS VOLTAGE SURGES/SPIKES

**SURGE PROTECTOR ADAPTOR**  
**£16.54**

**PLUG**  
**£13.14**

**FOUR GANG SURGE PROTECTOR**  
**£17.14**

SURGE PROTECTORS ACT INSTANTLY TO PROTECT YOUR EQUIPMENT AND DATA FROM HARMFUL SURGES. IN PRACTICE THESE SURGES CAUSE 'COMPUTER DOWN TIME' AND COST MONEY.

ALL PRICES INCLUDE VAT AND FREE NATIONWIDE DELIVERY

### HOW TO ORDER



**POST:-**  
Simply list your order, name and address, enclose a cheque or postal order (made payable to 'SBS Computer Supplies') or your credit card details to the full address below.

**PHONE:- (0273) 726331**

Our Express Hotline on 0273 726331 (10 lines, 24 hours) and order quoting your credit card number, name, full postal address and daytime phone number and the dept. number on the address below.

**DELIVERY:- (U.K. MAINLAND)**

Goods will normally be despatched same day by 1st class post — free of charge. Overnight deliveries and other areas by arrangement. We welcome purchase orders from commercial, educational and government establishments and also from overseas.

DEPT. 302 SBS COMPUTER SUPPLIES LTD. NEWTOWN ROAD · HDVE · SUSSEX · BN3 7BA

# INBUSINESS PCW from cavalier software

## SIMPLE INVOICING

Invoicing for Service Companies.  
Multi-Copy Invoices/Credits.  
Trade or One-off customers  
Trade Discounted Invoices.  
Day Book Listing & Profit Summary.

## STOCK CONTROL

Up to 2000 Stock Items.  
Average and Latest Costing.  
Automatic Suggested Re-Ordering.  
Individually Tailored Price Lists.  
Many Standard Prints & Displays.

## RETAIL STOCK CONTROL

Update of Stock from sales or by  
stock count (Bar Stock Control).  
Up to 5 self-designed labels.  
One-off label design and printing.

## ORDER PROCESSING

Multi-Copy customer invoice.  
Trade or One-Off Invoices/Credits.  
Alternative Delivery address  
Order quantities allocated to stock  
or back-ordered as necessary.  
Amendment of Standard Prices & VAT.  
Trade Discounted Invoices.  
Out of Stock alternative items.  
Free format invoicing for non-stock  
items.  
Cancel, Amend or List Back-Orders  
Manual or Automatic allocation of  
stock to Customer Back-Orders.  
Day Book, VAT & Profit Summary.

## REPORT GENERATOR

Design your own stock, back-order  
and customer/supplier reports using  
this easy to operate generator.

## CUSTOMER & SUPPLIER DATABASE

Create, Delete, Display & Amend  
Customers/Suppliers.  
Up to five contact names  
Analysis by name, type or business.  
Listings & Mail Shot Labels.

## **INBUSINESS MENU**

- A. SIMPLE INVOICING
- B. STOCK CONTROL
- C. RETAIL STOCK CONTROL & LABELS
- D. ORDER PROCESSING & INVOICING
- E. CUSTOMER/SUPPLIER DATABASE
- F. NOMINAL LEDGER
- G. RETAIL CASH ACCOUNTING
- H. SALES LEDGER
- I. PURCHASE LEDGER
- J. PERIOD-END ACCOUNTING & AUDIT
- K. REPORT GENERATOR
- L. CONTRACT ACCOUNTING

PLEASE MAKE YOUR SELECTION

## CONTRACT ACCOUNTING

Ideal for Builders, Solicitors &  
Contract Maintenance of all sorts.  
Up to 9999 separate contracts  
Allocation of costs by percentage  
or by value.  
Non-accounting adjustments such as  
labour costs.  
All entries posted to Sales  
Purchase and Nominal Ledgers.  
Display/Print Profit Statements.

## NOMINAL LEDGER

Balance Sheet, P/L & Trading A/C.  
Up to 9,999 Main & Sub Accounts.  
Self Balancing Journalisation  
Cash Book Entries  
Reports & Displays at three levels  
for all or parts of the ledger  
No pre-set control accounts.

## CASH ACCOUNTING

Up to 15 User defined payment types  
(CASH, ACCESS VISA etc).  
Up to 15 sales types (Till Buttons)  
Standard Posting of Bank Charges,  
Interest Received, Standing Orders  
& Credit Card charges.  
Easy Bank Reconciliation.

## SALES LEDGER

Batch Posting of Entries.  
All Postings are automatically  
reflected in the Nominal Ledger.  
Account Allocation with part or  
over-payments.  
Open-Item Statements.  
Aged Debtor Reporting.

## PURCHASE LEDGER

Batch Posting of Entries.  
All posting are automatically  
reflected in the Nominal Ledger.  
Allocation of accounts including  
Remittance Advice production.  
Open-Item Displays or Prints  
Aged Creditor Reporting.

## PERIOD END.

Audit reports of all postings.  
Monthly Nominal Ledger Balancing  
Year-End balancing and Accounting.  
Automatic posting of Invoices &  
Credits with Day Book.  
VAT reporting.  
Balancing of Selected Accounts  
Full Trial Balance.

## **PRICES (including VAT)**

Simple Invoicing	(menu options A & E)	34.95	
INSTOCK II	(menu options B to E)	74.95	
INTACT II	(menu options E to J)	74.95	
Report Generator	(menu option K)	14.95	Requires INSTOCK II
INBUSINESS PCW	(menu options B to K)	149.90	
Contract Accounts	(menu option L)	59.95	Requires INTACT II

Lifetime  
Support

No Disc  
Swapping



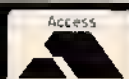
WE ALSO PROVIDE THE FOLLOWING SPECIALIST SYSTEMS;

TELEAD	(Name & Address database ideal for home, club membership etc.)	21.95
HOMEVIEW	(Estate Agents matching & mailing systems)	195.44
DINER	(Restaurant and Fast Food Menu, Stock and Billing System)	49.95

All options are menu driven, so are simple to operate.  
An Installation Program is provided for all AMSTRAD PCW computers.  
All carry free lifetime HOTLINE support and require no disc swapping.  
All programs fully integrate with all other programs, so you can buy a single module  
to start and when you are ready, add further modules to provide a complete business system.



**Tel: 01 639 6683** for more details or to place your order



Everywhere you go today, you take the presence of computers for granted. Booking holidays, requesting a book at the library, paying bills, using bank cash dispensers – they're all highly dependent on computerised data retrieval and processing systems, even though rumour has it that it was possible to book holidays and borrow books prior to 1978.

The first computers as we would recognise them, electronic storage and calculating machines, were built in the late 1940s, and didn't really make an impact on businesses until the 1960s. Even so, it's apparent that the ideas and inventions that led up to computers began centuries ago.

### Child's play

The oldest counting machine known is, of course, the abacus. It was known to be in use in China and the far east thousands of years ago, and it is still used as a ready-reckoner in many oriental shops and stalls.

The most common form of abacus is the Chinese *suan pan* ('reckoning board'). It's an arrangement of poles, every one having seven beads, the two above a crossbar being worth five of the ones below. The rightmost pole is the units column, the next the tens, the next the hundreds, and so on.

Numbers are represented on the abacus by pushing the correct number of beads up to the crossbar. So, 33 would be 3 lower beads on the tens pole and 3 lower beads on the units pole pushed up. To add 6, you slide one more lower bead on the units pole up, and one upper bead (worth five lower ones) down to meet the pole. The number 39 is then read off.

Skilled abacus users can plough through the arithmetic extremely fast, although there is a major problem: abacuses can't multiply or divide very easily. It wasn't until the 17th century that the next step came about. John Napier (1550-1617) was a Scottish mathematician who discovered how to take 'logarithms' (or 'logs' for short) of numbers. This proved the key to division and multiplication (see the box), and led to the invention of the next great calculating device – the slide rule.

A slide rule consists of a frame with a sliding insert, both marked in logarithmic scales from 1 to 10. To multiply 3 by 2.5, you locate the position of the 3 on the frame, move the slide so that the 1 is over it, and find where 2.5 is on the slide. The number on the frame that 2.5 on the slide is over is the result, 7.5. The distance from 1 to 3 on the frame represents the log of 3, the distance from 1 to 2.5 on the slider is the log of 2.5, so by adding them together you get the log of the product. Slide rules can usually be read to an accuracy of about 0.1%.

### Wheels and barrels

The next stage in the story of computers comes as people began to try to build machines to do the hard work for them. One of the earliest known true calculating machines was built in 1642 by Blaise Pascal (after whom the programming language is named).

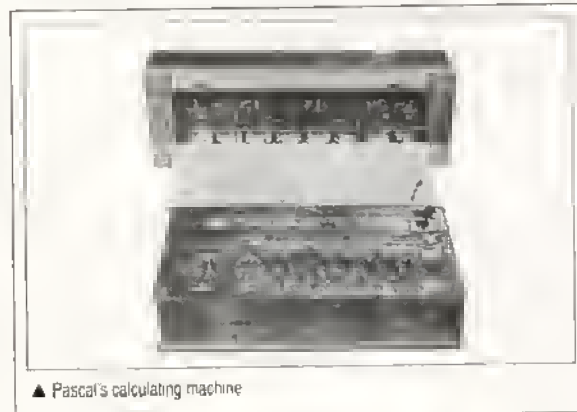
Pascal (1623-1662) was a French polymath, and to make matters worse he was the son of a tax collector. To help his father with the accounts he built his calculator when he was still 19. The figures were entered into the machine by turning a set of interlocking 10-toothed cogged wheels, and to add a new number in the relevant units/tens/hundreds etc wheels were turned as required. The machine could only add or subtract, so multiplication had to be done by repeated addition. Being very expensive, the machine was not a commercial success.

The next man on the scene was Gottfried von Leibnitz (1646-1716). He was a German philosopher and

# THE OLD DAYS

Computers weren't invented with the PCW in 1985 – Ben Taylor looks at the history of the technology.

mathematician, and in 1671 revealed his improved calculating machine. Rather than being based on interlocking wheels as was Pascal's version, Leibnitz used a cylinder with vanes of varying lengths for each digit. Cogged wheels meshed with the cylinder so that when the cylinder turned it moved as many wheels as were in contact with



▲ Pascal's calculating machine

whichever vanes reached them. The wheels carried numbers on them for the result to be read from. The barrel principle formed the basis of all mechanical calculators from then on.

Another refinement was made in 1820 by Charles Thomas of Alsace. He perfected Leibnitz's cylinder design by incorporating a stepping system for multiplication. When you wanted to multiply a number by 20, instead of adding it to itself 20 times Thomas's machine allowed you to shift the barrel one place to the right and only do the addition twice. Electrically powered versions of this 'Arithmometer', as it was poetically called, were on sale even in the 1940s.

Finally, in the 1970s the familiar electronic calculator swept away mechanical ones. Clive Sinclair was one of the British pioneers of the technology, and although he didn't invent them his commercial development and marketing

## The logarithm method

Every number can be expressed as ten to the power something. 1000 is ten to the power three, written as  $10^3$ , meaning 10 times 10 times 10. Napier thus called 3 the logarithm of 1000.

Now 100 is  $10^2$ , so the log of 100 is 2. When you multiply 1000 by 100 you get a 100,000 or  $10^5$ . Napier observed that  $10^3$  times  $10^2$  gives  $10^5$ , and if you add the logs of the numbers being multiplied you get the log of the answer, eg.  $2+3=5$ . Similarly, to divide two numbers you subtract their logarithms:  $5-2=3$ , and  $10^5 \div 10^2 = 10^3$ .

Taking logarithms of numbers reduces multiplication and division to a process of adding and subtracting, and is the basis for the 'slide rule', feared by many generations of schoolboys until electronic calculators came in.

The modern supercomputers which can multiply millions of mind-bogglingly large numbers a second are still struggling to find faster and faster ways to do arithmetic, but essentially all the methods used are variations of the theme of adding or subtracting logarithms.

## Blessed Ada

Babbage employed an assistant to work on his Analytical Engine – Ada, Countess of Lovelace, the daughter of Lord Byron. She wrote down instructions for when the Engine was built, and so can claim to be the world's first programmer. There is now a programming language called Ada in her honour.

strategies brought the price of electronic calculators down to within everyone's buying power.

## Towards programming

There is a very important distinction between a calculator – whether mechanical or electrical – and a computer. A calculator waits for the user to enter some numbers and ask for the result; a computer can run programs, meaning that it can store sequences of instructions and run them over and over again on different sets of data. The idea of programming didn't come about exclusively with computers, and there are many examples of programmable machines down the years.

The breakthrough in programmed machines was the Jacquard Loom, invented in 1805, a device which profoundly affected the Industrial Revolution and presaged a number of computing techniques. Joseph Marie Jacquard (1752-1834) was a French weaver from Lyons frustrated by the manpower needed to weave complex patterns. Looms work by having a set of warp threads and a shuttle; depending on the pattern, some of the warp threads are pulled up, the shuttle passed between the up and the down threads to create the weave, and then different warp threads pulled up for the next shuttle pass.

Jacquard developed a mechanical system of levers and springs so that a series of punched cards controlled which warp threads were up or down at any time – a hole in the card causes the corresponding warp thread to be pulled up, otherwise it stays down. In this way, an entire pattern could be coded onto cards, just like a program.

Inevitably, the weavers in Lyons were upset at the unemployment prospects, and tried (unsuccessfully) to drown Jacquard in the Rhône. By 1840 they had seen the error of their ways and erected a statue to him.

## Babbages and kings

Meanwhile, back in the world of mathematics and calculating machines, Devonshireman Charles Babbage (1792-1871) proved to be a major figure in the development of computers.

Babbage was a mathematician interested in automating some of the work on differential calculus that he was studying. He produced two proto-computers in the course of his life, the Difference Engine and later the more ambitious Analytical Engine.

In 1823 the government advanced him £1500 towards the cost of his Difference Engine. It was a mechanism of toothed wheels to calculate polynomial expressions, such as working out trigonometry tables (sines and cosines) and helping in the calculation of tides. An important innovation was the concept of an output method – the world's first printer

(reportedly it wasn't Epson compatible). The display wheels on the Difference Engine were inked and the results printed directly onto paper, thus eliminating typographical errors.

In 1834 the money ran out and Babbage's workforce resigned. Babbage himself never finished the Difference Engine, although one was built in Sweden in 1855 to his designs. Instead, Babbage moved on to his Analytical Engine. This was to be steam powered, having punched card input stages and printed output, and modern analysis of his designs has shown that it genuinely would have been able to provide significant computing power, more than some early electronic computers.

It's all would-have-been, for despite spending £20,000 of his own money Babbage never got past building a few parts of the Analytical Engine. (The Science Museum in London has these on display.) An apocryphal tale has it that mechanical engineers now reckon that even had a full version been built using materials around at the time, the main drive shaft carrying the mechanical power to the various parts would have sheared under the stress.

You can see that not only did Babbage have some brilliant ideas on computing machinery design, but he also provided the inspiration for many of today's computer companies by working for years designing products that were never quite delivered.



▲ The Jacquard loom



▲ A section from Babbage's Difference Engine



▲ Hollerith's card sorter

## Information not numbers

A closing chapter in the story of mechanical computing is due to Herman Hollerith (1860-1929). Until now, almost all the calculating machines mentioned had been built by mathematicians for their studies, but Hollerith made the first steps in what is now called Data Processing.

The US took a census of its population every ten years, and the 1880 census took eight years to analyse. Fearing that from 1890 onwards the processing would take more than ten years per census, the authorities were worried. Hollerith designed an electrically powered sorting and collating machine where the data was input on punched cards. Hollerith's machine processed the records for 63 million people in two and a half years. The US Census Bureau estimated the machines saved them 5 million dollars.

Hollerith realised his card-based data processing system had other business uses, and set up a company to market his machines. This he called the Hollerith Tabulating Machine Company, which in 1911 became International Business Machines Inc. IBM is now one of the biggest companies in the world, with a turnover bigger than many countries' gross national product.

● Next month: mechanics give way to valves and transistors. During the Second World War the intelligence services realise the importance of computers, and the first true electronic machines are built.

# HEAD COACH v3

At Coda Software we believe we have created the most challenging and realistic computer simulation of American Football that is currently available. 'HEAD COACH v3' is a direct simulation of the National Football League and offers you the opportunity to coach a team in the world's toughest league. Here are some of the features.

- Playbook featuring over 40 offensive and defensive plays
- Full roster of players
- Database of all N.F.L. terms
- Pre season/regular season/playoffs and superbowl
- Ability to change your team during a match
- Injuries and training camp
- Rookie players and the college draft

But don't just take our word for it, read what previous satisfied customers have said:

- "absolutely amazed by the realism" — J.H. Twickenham
- "Excellent" — S.H. Northants
- "I am now addicted to the game" — R.C. Lincs
- "Superb" — N.E. Essex
- "Software and presentation are excellent" — D.F. Bushey

The Database of players and information on all teams which makes 'HEAD COACH v3' so realistic, can easily be altered by the user if and when necessary to keep the game fully up to date. However, as a service to all new CODA SOFTWARE customers, we are offering regular information updates **FREE OF CHARGE**.

AMSTRAD PCW DISK £15.95 BBC B/MASTER DISK £13.95  
AMSTRAD PC1512/IBM COMPATIBLE VERSION; PLEASE PHONE

Available by Mail Order (all orders despatched within 24 hours) or please phone us if you require more details.

**CODA**  
SOFTWARE

DEPT. 8000,  
4 ST. SIMONS AVENUE LONDON SW15 6DU.  
TELEPHONE 01-789-9551

**AEON**

**AEON COMPUTER HOUSE**

COMPUTER CONSULTANTS • COMPUTER SYSTEMS • SUPPLIES & TRAINING

## BUSINESS MICRO SPECIALISTS

Try our professional & friendly service for all your computing requirements!

- ★ Full range of software & peripherals
- ★ Computer Systems
- ★ Networked Systems
- ★ Supplies
- ★ Repair Service
- ★ Installation
- ★ Maintenance Contracts

(Sample prices ex VAT:)

PCW8256 .....	285.00
PCW8512 .....	379.00
PCW9512 cw "Locoscript II + high quality, wide carriage daisywheel printer .....	474.00

Export, Educational & Official purchase orders welcome.

Open Monday ~ Saturday 9am-6pm. Telephone Orders Welcome.  
**FREE Delivery**

46 Christchurch Road, Oxton, Wirral L43 5SF

Tel: 051 652 9196/7

Telex: 265871 MONREF G Quote Ref: 72 MAG50053

## THE OFFICIAL AMSTRAD PROFESSIONAL USERS CLUB

**AMSTRAD USER CLUB**  
It pays to belong!

**AMSTRAD USER CLUB**  
It pays to belong!

**AMSTRAD USER CLUB**  
It pays to belong!

**AMSTRAD USER CLUB**  
It pays to belong!

**AMSTRAD USER CLUB**  
It pays to belong!

▲ AMSOFT AND MORE ... DIRECT TO YOUR DOOR. JOIN THE CLUB ... SCOOP THE SAVINGS ▲

BY JOINING the Official Users Club you can buy a whole range of new software at fantastically low prices to make your Amstrad even more versatile and useful than ever.

By taking advantage of the savings you will recoup your membership fee in only weeks! Look what else you get:

- ▲ The widest range of branded Amstrad approved products stocked in depth at substantial discounts.
- ▲ HELP HOTLINE for any technical advice you need. Absolutely FREE!
- ▲ 12 MONTHS FREE subscription to Amstrad PCW Magazine.
- ▲ 24 hour telephone ordering facility.
- ▲ FREE monthly newsletter, packed with hints, tips and reviews.
- ▲ Exclusive products for club members.
- ▲ Privileged previews of new products.
- ▲ USER CLUB TRAINING CENTRE: Includes home consultancies, training centre, books, and Home Study packs.
- ▲ Products delivered direct to your door.
- ▲ Big prize competitions.

### CLUB MEMBERS ALWAYS SAVE

#### ▲ PCW OWNERS ▲

We always try to stock the products which the PCW user urgently requires. Our prices are discounted to our members and present items in stock includes: Locomail, Supercalc II, Modems, Menu-Mate, Tempmate, Pageboy, Step-by-Step guide to Locoscript, Top Games, Blank Discs, Printer Ribbons, Cleaning kits, Dust Covers, Disc Boxes, Printer Stands, Anti-Glare Screens, plus a comprehensive range of educational software and much more...

#### RING FOR DETAILS

STOP PRESS... We now have in stock the only 3" disk drive head cleaner in the UK

### INTRODUCTORY GIFT ABSOLUTELY FREE!

When completing your application form below, please write in the space provided your choice of free introductory gift which you will receive along with your 'Welcome Pack.'

1. 2 Blank 3" discs.
2. Step-by-Step Guide to Locoscript.
3. Tempmate & Pageboy (for Locoscript).
4. PCW computer cleaning kit.
5. Magazine binder - holds up to 12 issues
6. Menu Mate.
7. High quality fabric ribbon.
8. Plonker box.

Please choose one of the above and write description below.

### ORDER ACTION LINE - DIAL 091-510 8787 NOW!

For extra-fast attention, order now by phone quoting Access or Visa number.

Or fill in the coupon below and send to the

OFFICIAL AMSTRAD USER CLUB, ENTERPRISE HOUSE, P.O. BOX 10, ROPER STREET, PALLION INDUSTRIAL ESTATE, SUNDERLAND SR4 6SN.

Simply fill in the coupon and return it to us at the address shown together with your remittance. We'll send you your exclusive membership card along with your 'Welcome Pack' and your Free Gift.

FOR OFFICE USE ONLY

Yes, I want to enjoy the benefits of Amstrad Professional Users' Club Membership - Please enrol me today! I enclose cheque/P.O. for £39.95.



ACCESS/ VISA:

Expiry Date:

My choice of FREE gift is:

My machine model is:

Name:

Address:

Postcode:

Tel No:

All offers subject to availability; all prices correct at time of going to press.

POST TO

OFFICIAL AMSTRAD USER CLUB

ENTERPRISE HOUSE PO BOX 10 ROPER STREET

PALLION INDUSTRIAL ESTATE SUNDERLAND SR4 6SN

**AMSTRAD USER CLUB**  
It pays to belong!

# RMS INTERNATIONAL

## PCW Discs

Amsoft CF2 per 10 .....	£23.95
Amsoft CF2 per 5 .....	£12.95
Maxwell CF2 per 10 .....	£22.95
Maxwell CF2 per 5 .....	£12.49

## Storage

AMS20L .....	£12.95
holds 21 CF2 in lib. cases	
PROTO BOX .....	£ 6.95
holds 10 CF2 ex. lib. cases	

## Dust Covers

Keep the dust at bay with this cotton piped PVC set at the low price of **£9.95**

## PCW Software

Leather Goddesses .....	£19.96
Moonmilk .....	£19.96
Tomahawk .....	£15.96
Hitchhikers Guide .....	£19.96
Hitchhikers Clue Book .....	£ 6.95
Star Glider .....	£19.95
Fairlight .....	£12.95
Strike Force Harrier .....	£15.96
Colossus Bridge 4 .....	£12.95
Colossus Chess 4 .....	£12.95
Steve Davies Snooker .....	£14.95
Head Over Heels .....	£12.95

## PCW Hardware

*PCW9512 .....	£479.00
*PC1512 SD Mono + 20Mb .....	£599.00
*PC1640 SD Colour + 20Mb .....	£949.00
CPS8256/8512 interface .....	£ 59.95
Serial Cable .....	£ 12.95
Parallel Cable .....	£ 12.95
FD2 Second Drive PCW .....	£142.95
Memory Upgrade Kit .....	£ 24.95
PCW Work Station .....	£113.95

\* Plus VAT

## Desktop Publishing

Fleet Street Editor + .....	£49.95
Newsdesk International .....	£37.95
Desktop Publisher .....	£23.95
Desktop Pub. + mouse .....	£67.96
E. Studio snip art .....	£13.80
E. Studio font module .....	£18.40
Graphics op. system .....	£58.95

9512 software phone for prices

## Wordprocessing

Amor Protext .....	£47.95
Amor Pocket Protext .....	£34.95
Pocket Wordstar .....	£35.65
Pocket Wordstar Deluxe .....	£56.66
Newword 2 .....	£59.80
Taxword 8000 .....	£18.95
Amor Prospell .....	£22.95
Amsoft Locospell .....	£29.95
Taspeil 8000 .....	£12.85
Supertype .....	£18.49
Tasprint 8000 .....	£11.95
Locoscript 2 .....	£19.49

9512 software phone for prices

## Spreadsheets

Supercalc 2 .....	£39.96
Cracker 2 with graph .....	£39.20
Caxton Scratchpad .....	£44.95
Rotate (sideways print) .....	£18.95

9512 software phone for prices

## Graphics

DR Draw .....	£ 39.00
DR Graph .....	£ 39.00
E. Studio light pen .....	£ 64.40
E. Studio mouse .....	£106.56
Signwriter PCW .....	£ 39.96
Extra fonts for above .....	£ 5.75

9512 software phone for prices

## Mailmerge

An essential tool for anybody involved in direct mailshots

Amsoft Locomail .....	£29.95
Dataflow/Mailflow III .....	£39.96
Flexilabel .....	£27.95

## Database

Masterfile 8000 .....	£39.90
Database man. (At Last) .....	£22.95
Caxton Cardbox .....	£44.59
Delta 1.25 .....	£74.24
dBase II .....	£85.95
Plan It .....	£19.95

9512 software phone for prices

## Communications

Sage Chit Chat Combo .....	£209.99
(inc modem)	
Sage Chit Chat Email .....	£162.49
(inc modem)	
Sage Chit Chat Combo .....	£ 79.20
Sage Chit Chat Email .....	£ 55.99
Sage Chit Chat VData .....	£ 55.99
Miracle WS4000 modem .....	£179.40
Pace Linnet modem .....	£147.95

9512 Comms phone for prices

## Printers

Star NL10 DMP 120CPS .....	£219.00
(Which report recommended buy)	
Star NX15 wide carriage .....	£349.00
Micro P. MP36 daisywheel .....	£258.75
Micro P. MP40 daisywheel .....	£379.50
Parallel lead 2m .....	£ 12.95

## Paper

11 x 9.25 60GSM 2000 sheets .....	£14.95*
11 x 9.25 70 GSM 2000 sheets .....	£16.95*
A4 70GSM 2000 sheets .....	£20.95
A4 90GSM 1000 sheets .....	£13.95
11 x 14.5 60GSM 2000 sheets .....	£20.95*
1000 Labels 1 across web .....	£ 5.99
2000 Labels 2 across web .....	£ 8.49
* plain or music ruled	

## Miscellaneous

Amor BCPL .....	£32.95
Amor Maxam II .....	£39.96
Amor 'C' .....	£39.96
PCW Ribbons black fabric .....	£ 3.95
PCW Ribbons black carbon .....	£ 5.50
PCW ribbons coloured .....	£ 4.95

## Accounts

Camsoft Int. Acc. SISPN .....	£111.34
Camsoft Int. Acc. SPN .....	£ 74.12
Camsoft Invoicing .....	£ 37.95
Camsoft Sales Ledger .....	£ 37.95
Camsoft Purch Ledger .....	£ 37.95
Camsoft Nom. Ledger .....	£ 37.95
Camsoft Stock Control .....	£ 37.95
Camsoft Payroll .....	£ 37.95
Compact Accounts .....	£148.46
Compact Accounts Plus .....	£185.62
Map Int. Accounts .....	£104.99
Sage Super Combo .....	£161.99
Sage Accounts Plus .....	£104.99
Sage Combo (payroll) .....	£104.99
Sage Popular Accounts .....	£ 74.95
Sage Payroll .....	£ 54.59
Advanced Money Manager .....	£ 22.95
Adv. Money Manager Plus .....	£ 29.79

## Books

The Amstrad CP/M plus .....	£12.95
Int. Amstrad CP/M Assembly Lan. .....	£ 9.95
Practical Amstrad W/process .....	£ 7.95
Amstrad Communications .....	£ 8.95
Program your PCW 2nd Ed .....	£ 6.95
Mastering the Amstrad PCW .....	£ 8.95
Using dBase II .....	£19.95
Users Guide to dBase II .....	£13.95
Pocket Wordstar PCW .....	£ 7.50
Get Started BASIC/Logo .....	£ 5.95
Supercalc prompt 2nd ed .....	£ 9.95
Introduction to Pascal .....	£17.95
Desktop Publishing .....	£ 6.95
Programming the z80 .....	£19.95
Using Databases PCW .....	£ 8.95

Over 1500 Titles for computers and software, phone for prices

## Bespoke Stationery

Sage statements 250 .....	£12.95
500 .....	£23.95
1000 .....	£39.95
Sage wage slips 250 .....	£14.38
500 .....	£27.95
1000 .....	£49.95

Stationery available for Compact, Camsoft, Map or to your own design.

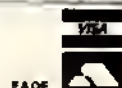
## RUGBY MICRO SPARES

36a ABBEY STREET,  
RUGBY WARWICKSHIRE  
ENGLAND CV21 3LH

**0788 69344**

TELEX NO. 312242 MIDTLX G

We accept Official Purchase Orders from Government and Educational Establishments.  
All discs usually dispatched SAME DAY by 4pm. Place your order using your Credit Card.  
Prices and Delivery subject to availability. All prices inc. VAT and Delivery



ESOE

## KNIGHT ORC

£19.95 • Level 9/Rainbird (01-631 5373)

• All PCWs

It's strange, I know, but ever since Christmas I've had this peculiar feeling that there's a small block of cement lodged deep in the pit of my stomach. Now there are two possibilities: either it's a piece of my dear old grandmother's home-made Christmas pud or...it's a lump of cement. Is it really possible that an eccentric octogenarian with tailing eyesight could somehow mistake cement for flour...?

This game is similar in style to Level 9's recent solo effort, *Gnome Ranger*, reviewed a couple of issues ago. Once again we are transported to a mythical land inhabited by a cocktail of out and out weirdos -- Odin (renowned trumpet enthusiast), Boadicea (intamous anglo-saxon feminist) and Fungus the Boggitman, highly respected for his SF novel, *The Trouble with Lichen*.

You take the part of an Orc who goes by the enchanting name of Grindleguts. Orcs, as you're no doubt aware, are

# ORCS AND DOVES

Tony Flanagan magicks his way through the new adventure from Level 9

they are very vicious and delight in nothing more than, beating an Orc or two to pulp, or watching them plead for mercy as in a James Anderton fantasy.

When you are not being beaten up yourself -- usually lethally -- you stand back and watch the characters beat the hell out of each other. If you can manage to survive long enough you must find a way of getting across the viaduct to Orc Mountain, the focal point of games two and three: *A Kind of Magic* and *Hordes of the Mountain King*.

## Taking the scenic route

One of the advantages of this game, like *Gnome Ranger* is that there a number of powerful commands available which really makes map-making unnecessary. *GO TO* enables you to go to most destinations taking the scenic route. In other words, each location you pass through is described, brief as such descriptions may be. Similarly, *RUN TO* also takes you relatively quickly to your choice destination but omitting the descriptions.

On the other hand, the advantages afforded by such commands can, paradoxically, detract from the overall quality of the game. The short-cuts made possible by such commands mean that though action is speeded up a great deal of atmosphere is lost. One of the most rewarding features of adventure playing is when you find an object in the unlikelyst of places. The implication is that Level 9 are placing more emphasis on problem-solving than other traditional ingredients of adventure playing.

Still, one of the fascinating features of *Knight Orc* is the way in which you can get the other characters to work for you. The *WAIT* command, for example, can be used to assemble characters at a particular spot for a specific purpose. They can also be sent to perform tasks, the results of which you find out about later on in the gameplay.

The text is accompanied by some adequate graphics screens -- not up the standard of *The Pawn* by any means -- though these add little to the game and only slow things up anyway. The package includes a comprehensive playguide as well as a short novella, as per the usual Rainbird packaging.

There is no doubt *Knight Orc* is an addictive adventure, with lots of action, plenty to explore and mind-bending puzzles. A good adventure to start off the new year.

### PLUSES

- High level commands
- Demanding puzzles
- Light, humorous touches
- Excellent playguide

### MINUSES

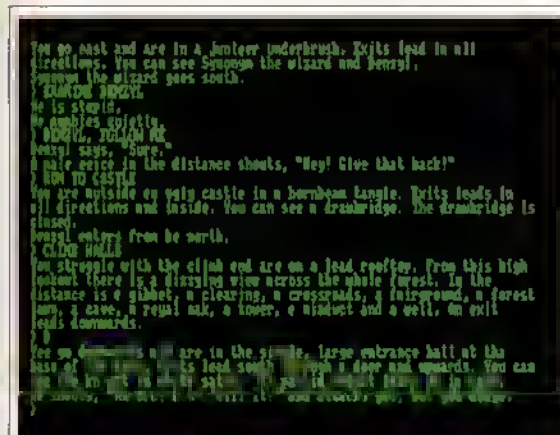
- Too many characters initially
- Locations need tilling out
- The action can get monotonous

ATMOSPHERE  
INTERACTION

■■■■■  
■■■■■

CHALLENGE  
VALUE VERDICT

■■■■■  
■■■■■



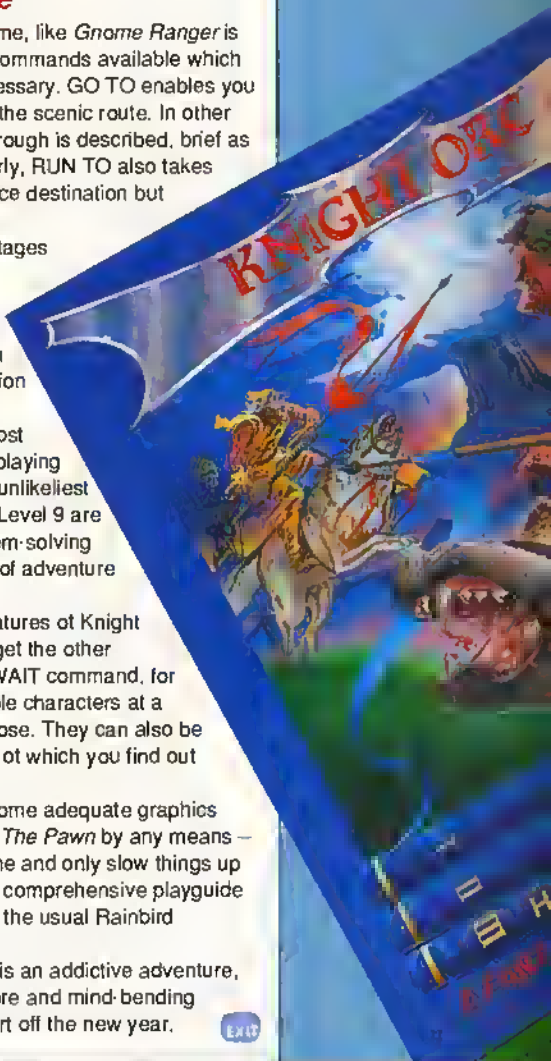
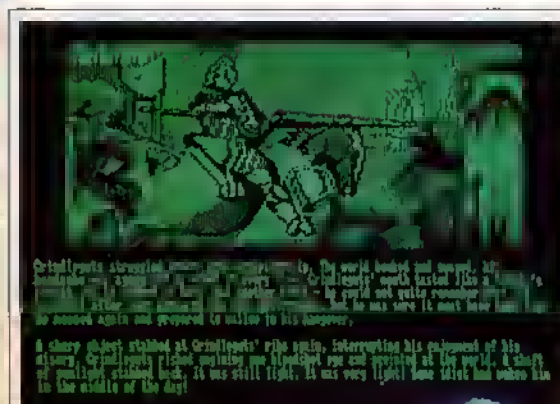
▲ Knight in White Sails? I thought that was a song.

very smelly creatures who live in worm-infested holes and are forced to eat spiders to stay alive. (What I want to know is what are the council doing about it?) Indeed, it seems that Orcs have nothing very much going for them at all. Not only are they indescribably ugly but they lack any useful skills whatsoever (and that's without the benefit of a YTS scheme!).

As Grindleguts is slightly less intelligent than his fellows he has been 'volunteered' to take on the odious role of hero. This involves being too hardy to the point of insanity, attempting to solve impossible puzzles and generally dying several times over for some frivolous cause. Still, it's not your fault they strapped you to your horse or, kind dears that they are, that they entered you for the jousting tournament, knowing that you hadn't a chance in Hades of winning.

## Are you sitting comfortably?

In this way, the trilogy of games begins. Your initial task is to avoid being killed by any of the many characters you encounter as you explore this side of Orc Mountain. Most of



# ALIVE!

The LocoScript add-on software they could not destroy!

**AnsibleIndex** and **AnsibleCheck** are back, fully compatible with all current versions of LocoScript.

These programs are indispensable to professional writers, academics, researchers (etc), using the **Amstrad PCW 8256/8512/9512**:

**AnsibleIndex** - Fully featured extraction indexer for LocoScript text documents. Alphabetization by letter or by word. Correct page references. Indexes WORDS, PHRASES and INVERTED PHRASES. Full editing of the index is possible, plus page-proof compatibility. (Includes AnsibleCheck, and other useful programs.) Price: **£49.50**

**AnsibleCheck** - The only trouble-free LocoScript word counter. No special formats, no commands to learn, no estimates. Fast and reliable. Looks for repeated words too. Price: **£19.50**

Both packages include the notorious GREASE, which we originally wrote for fun, but which people keep finding new uses for ... If you wish to know more about any of our programs, request our current information sheet.

Our software is accompanied by an operating manual written in plain English. The price shown includes VAT, delivery anywhere in the world and full after-sales support. No hidden extras!

## ANSIBLE INFORMATION (Dept D9)

94 London Road

Reading

Berkshire, RG1 5AU, England

Tel: 0672 62576

## AMSTRAD ACCOUNTS

PCW 8256 - PCW 8512 - CPC 6128 - PC (Early 1988)

This system is no nonsense, purpose designed, traditional style double entry book-keeping, capable of operating at any level from a simple account right up to a fully sophisticated feature packed system to handle up to 500 Nominal ledger accounts plus 999 Sales and 999 Purchase ledger accounts.

### BOOK-KEEPING and ACCOUNTS

By A.G. Clough F.C.A.

PRICE including manual £57.50

Write or phone for detailed information or, as we strongly recommend, **SEND £5 FOR A COMPLETE DEMONSTRATION PACKAGE**

This package, on one disc, programs one side, data on the other, contains the whole unabridged system ready to use, less only the facility to set up the accounts. We have done this already, setting up more than 200 example accounts with representative prime entries for a typical month, ready to put to experimental use immediately after copying the disc.

**EXPERIMENT WITHIN MINUTES.** Without studying a manual, having read only the simple single sheet instructions, you can, for example, view any ledger in normal or historic mode, sequentially or by random account, produce statements or payment advices, practise prime entries, study a credit control analysis, read or print a Trial Balance and even do a pseudo profit or loss calculation for the period.

If you have any real interest in single user straight book-keeping, as business man, professional or student, **WE GUARANTEE YOU WILL NEVER, EVER INVEST £5 ON COMPUTERISED BOOK-KEEPING TO BETTER PURPOSE.**

If you genuinely disagree, tell us why; return our disc undamaged within 30 days, and we will refund your £5.

#### ALSO AVAILABLE:

With Invoicing .....	£69.00
With Invoicing and Stock Control .....	£80.50
Independent invoicing .....	£13.50
Independent invoicing and stock control .....	£23.00

#### CLUB ACCOUNTS

For Golf clubs and the like with full book-keeping facilities including subscription ledger and bar takings control.

PRICE: ..... £69.00

Manx Tapes, Garey Veg, Glen Auldryn, Ramsey, Isle of Man  
Telephone (0624) 813071

# MONEY MANAGER PLUS

**£39.95**

(incl. VAT)

Amstrad PCW  
8256/8512/9512

Easy to use Financial Management Software

Over 12,000 users!

**£39.95**

(incl. VAT)

Amstrad PC  
IBM PC etc.

Small Businesses  
Company Departments  
Expense Accounts

Doctors  
Dentists  
Lawyers

Professionals  
Tradesmen  
Home Accounts

Writers  
Farmers  
Colleges

Clubs  
Charities  
Etc. etc!

**MONEY MANAGER PLUS** is an easy to use yet powerful accounting system. It will enable you to record and analyse all your financial transactions, so that you know exactly where you stand and can make sensible and informed financial decisions. Check bank statements, monitor cash flow, analyse sources of income and expenditure, make budget forecasts, prepare financial statements. Keep one step ahead of your bank manager, convince tax or VAT inspectors, avoid nasty surprises!

**MONEY MANAGER PLUS** is very much easier and faster to use than ordinary systems. It has several reporting, analysing and graphic facilities not available in even the most expensive accounting systems. It would take you months of effort with a sophisticated database/spreadsheet/graphics package to achieve half of what **MONEY MANAGER PLUS** can. Whether you run a substantial business or just need to sort out your personal finances, **MONEY MANAGER PLUS** can help you.

To run the system you just switch on, load **MONEY MANAGER PLUS**, and select a data file to be loaded from your disc into the system. You can then make new entries in any order that suits you (or amend existing entries). You can reconcile entries against bank statements received. You can produce your own statements and reports (including graphical charts) with amazing variety and selectivity to answer any questions you might have about your current financial situation. You then save the data file for the next time you need to use it. You may have any number of separate data files (or sets of accounts) covering several years, and store several on one disc. When required, a 12-month data file can be rolled forward by a month at a time.



- 12 months accounts per file, 300 entries per month
- Up to 9 user-defined accounts (banks, cash, credit cards etc)
- Up to 50 user-defined classes of income/expenditure
- Optional reference (up to 6 characters) for each entry
- Your own descriptive text (up to 18 characters) for each entry
- Optional extra label in each entry to allow further selectivity
- Fast and easy data entry - like filling out a bank statement
- Correct incorrect entries at any time
- Standing orders/standing entries
- Sort entries into date order when required
- Detailed statements for any range of months
- VAT reports in detail and in VAT return format
- Monthly reports for each class of transaction
- Reports showing activity in each account

- Consolidated class group reports
- Account balances month by month
- Bar charts for up to three categories of entry
- Pie charts for up to 12 categories of entry (PC)
- Facility to search through accounts for lost items
- Total monthly income, expenditure and cash flow
- Account and class totals
- Bank statement reconciliation
- Budget cash flow forecasts
- Automatic creation of data file back up copies
- Print all reports
- Comprehensive manual
- Two sets of practice data
- Free telephone support

For mail order, send a cheque for £39.95, or phone quoting an Access, Visa or American Express card number, and the program will be mailed to you within one working day. Please specify model of computer! Mon-Sun 8AM-10PM

**Connect Systems 3 Flanchford Road, London W12 9ND. Tel.: 01-743 9792**

**A**ll writers are bound to be conscious, and sometimes critical of their relationship with words. Like all good relationships, this has a physical side to it: some writers pay great attention to their surroundings and to the actual process by which they lay words on the page. Hemingway, for example, always wrote standing up, using a pencil for first drafts and typing (still standing) his final versions. Sharpening pencils – seven of them for the day's work – was one of the rituals by which he psyched himself up to write; perhaps it expressed the practical approach he liked to adopt towards his writing.

For many of us our PCWs have been our first introduction to a new sort of physical relationship to the words we write. The ability to edit and redraft pages over and over again is exciting – yet there is something faintly disturbing about having the power over words, skimming around sentences and pushing paragraphs around as though suddenly given the freedom of the road.

Perhaps word processing is physically a little like driving. Some people find it exhilarating, some tiring, some are largely indifferent to it. In general though, cars have certainly greatly changed our attitudes towards roads. Is word processing changing our attitudes towards words?

Perhaps, for example, we will find ourselves as readers becoming more sceptical of the writer's artful constructions. The brilliant counterposition of themes, the significant repetition, the subtle ambiguity and the sly allusion may impress us less when we all have direct experience of how words are just like that in the electronic age: manipulable at whim, almost infinitely movable, and yet as volatile and insubstantial as spirits. That demystification would not necessarily devalue the writer's art: but it may just put a new perspective on it.

## Tell me a story

What is it like to be a modern storyteller? Story-telling is older than history; yet what is the relation between the ancient storyteller who makes the story up as it is spoken, and the person whose story is structured and polished in front of the famous green screen? And what relation is there between the character in the ancient story whose existence depends on the human memory of speaker and hearers and the characters who come into being in the memory of a PCW?

William Shakespeare did not seem to be entirely sure how to spell his name. In every signature we have he spell it differently. This was not uncommon; concepts of 'correct' spelling were quite foreign to the Elizabethans. This freedom shows in the way he treated words, using wordplay, punning and allusion with a naturalness no-one before or since could copy. As the idea of a correct spelling grew up, and dictionaries were written which ultimately became arbiters of how words should be spelt, so the kind of pun and wordplay at which Shakespeare excelled came to seem more forced and frivolous. The technical advance changed the writer's relationship to words. Will the word processor do the same?

What about the future of the book? One of the stock predictions of science fiction must be the "electronic book". Indeed, we already have electronic publishing, mainly of scientific and technical literature, where hard-copy (that's paper to you and me) is produced only on specific demand, and transmission to the reader can as easily be by telecomms link. If a book exists primarily in some sort of electronic storage medium, then at what stage does it



# AWAY WITH WORDS

In the electronic age, what future is there for books and writers? Ben Plouviez has a few thoughts on the matter.

become a finished piece of work? Why should it not go on growing and changing and being rewritten – perhaps not always by the same person – indefinitely? Perhaps literature will become more of a process than a product, with 'readers' (people accessing the book) doing so to spot and enjoy the alterations and reshaping of the story since they last looked at it, and maybe taking a hand themselves in the process of 'writing'.

## Oral's well that ends well

And that does seem to take us back to where we were before, with the oral storyteller whose audience might chip in and make a few suggestions. Or perhaps even more closely it resembles the world of written texts before the invention of printing. The monks who copied manuscripts in mediaeval monasteries did not regard their texts – even their biblical texts – as sacred. They mixed commentary, explanation, judicious forgery designed to expose a heresy, and passages from other books into the texts they copied.

Electronic publishing may take us in the same direction: away from seeing literary work as a sacrosanct product to be revered, towards an idea of it as something mutable and infinitely perfectible. Some even suggest that we will see the four-hundred year history of printing technology, with the artificial distance it imposes between writer and reader, as a massive red-herring in the history of human communication.

I think there are already developments which point this way. For example, on the present-day bulletin boards where you access and distribute computer programs with the help of a modem and phone link, programs are written and rewritten. This isn't necessarily to make them do any more but simply to make the code more elegant, or to save fractions of a second, or just for the joy of taking part in a creative process. Perhaps this will be the model for the

EXIT

## Beauty of jargon

WYSIWYG, if you haven't come across it before, stands for "What You See Is What You Get". It is also one of my favourite words. I don't believe in scolding jargon just because it is jargon, where would half our English poets have been without the jargon of seafarers to draw on? This bit of jargon is quite neat and a useful word. How about a campaign for WYSIWYG politicians?

Rational Solutions is pleased to announce the launch of

## AtLast Plus

The new enhanced version of their best-selling database program AtLast for the Amstrad PCW computers and CPC6128, also known as **The Database Manager**.

This Database application generator achieved its fame from its unique and unrivalled combination of exceptional versatility, speed, ease of use and low low price. But don't take our word for it – listen to what the reviewers said:

"Superb value for money and hard to pick holes in"

"Powerful features... as clever as the user makes it"

"Many attractive features... its search features are particularly valuable"

– 8000 Plus

– Amstrad Professional Computing

– Computing With The Amstrad PCW

But some of you weren't satisfied. You wanted even more features than were already packed into the program and improvements in the manual and user interface. We listened to you and now we are proud to recognise the contributions our users have made to the design of AtLast Plus

So now we thank you. All existing users of AtLast are offered AtLast Plus at half price. Send the front page of your old manual, your serial number and £19.95 to Rational Solutions at the address below and we will send you AtLast Plus

### \* FEATURES \*

#### \* Data Capacity and Economy

Can use all the available space on your disc up to maximum of 32,000 records or 4Mb per file. 10 files per database, 20 field arrays per record, 99 elements per field array, up to 79 characters per element. Records of 2000 characters are handled with ease.

Unused data space is not saved to disc and therefore use of disc space is optimised. Typically three times as many names and addresses can be kept on a floppy as on a fixed format system. Will operate happily on a single floppy machine PC or a hard disc if you have one

#### \* Semi – relational

Records can be related between files so that you can switch from one record to a related record in a few key-strokes.

#### \* Report and screen layouts

All screen layouts and report forms are user-definable using a built-in mini-word-processor and you can have as many as you like for each file. Examples are data entry screens, browsing screens, columnar listings, labels, letters. Any data item (field element) can be positioned anywhere and mixed with explanatory text as desired. Simple "default" forms are created automatically for each file.

#### \* Reports

Data can be exported via ASCII files in any layout desired (e.g. for mail-merge via virtually any word-processor that has a mail-merge ability).

Listings can incorporate "head" and "tail" sections, with field totals, if desired.

Listing parameters can be re-used for successive listings, changing only those that need to be changed.

#### \* Data Entry

Data can be entered and individual fields edited using full on-screen control, passing up or down through fields at will. Data entry forms will scroll up or down on screen as required.

All data is validated on entry according to its type.

An integrated environment means that you can search to see if a record is already there, using a selection filter if you wish, before adding, editing or deleting it. Index files are automatically updated without your even noticing.

#### \* Indexing/Sorting

Up to 5 index files for any data file, each ordered on up to three levels (data items) with entries up to 30 characters. Uses state-of-the-art "B-trees" buffered for almost instantaneous access. No tedious sorting required.

Mixed case fields give true alphabetic ordering – no need to use upper case only.

Any index can be used for either listing or browsing order or for searching for individual records.

#### \* Selecting

Selection conditions can be imposed on any field or combination of fields when listing using Equal To, Not Equal To, Before, Equal or Before, After, Equal or After, Contains (substring) or Does not contain. Selection conditions can now be used when browsing or searching for individual records

#### \* Field Types

A versatile range of 9 field types is available. Types include date (0-9999AD), time (HH:MM:SS), automatic serial numbers and pre-defined lists.

#### \* Data Security

Any file can be protected from editing, adding to or deleting or any combination of these.

#### \* Data Re-organisation

Data definitions can be edited without having to re-type data. In most cases, this is handled automatically.

#### \* Manual

A new manual to make things easier for beginners.

#### \* Menus

Menu-driven throughout, mostly requiring single key responses for ease of use. No programming language to learn.

Computers PCW8256, PCW8512, PCW9512, and CPC6128

Price £39.95 inc VAT from all good dealers or order direct

(no postage charge for UK or Europe) From:

# RATIONAL SOLUTIONS LTD

Carn House, Carnworthy Water, Nr. Launceston, Cornwall. PL15 8UB

Tel: 056681 511 / 01 874 6244



## THE PROFESSIONAL ADVENTURE WRITER

£27.95 ● Gilsoft (0446 732765) ● All PCWs

After a hard day slaving over spreadsheets and databases, what better than to dive into the fantastic world of adventure games. And as PCW owners are such a creative bunch, why not go further and write your own games? It isn't as difficult as you might think, even if you think you have no programming skills, as Gilsoft have just released an 'adventure creator' for the PCW.

The Professional Adventure Writer aims to allow those with imagination to create text-based adventure games with their own scenarios, characters and puzzles. Several years ago Gilsoft released The Quill, which went from strength to strength as versions were written for most major home micros. Gradually add-on packages appeared which offered graphics and other goodies, until convoluted manipulation could produce games which stood out from the crowd. But integrating the various programs was a fiddly business, only to be tackled by experienced users. In response Gilsoft created Professional Adventure Writer (PAW), which is a combination of The Quill, its various bits and pieces and other new improvements.

### Flexi-time

Adventure creator programs need to strike a balance between flexibility and user-friendliness, on the one hand taking the drudge out of routine programming while on the other allowing the author plenty of scope to present a game with individuality and original style. PAW scores highly in this department. All the basic adventure routines are built in – movement between locations, handling objects both singly or as a batch and even coping automatically with worn objects and containers. Various keywords are provided in the programming language to cope with these situations, but if you don't like the way PAW handles things or you want to introduce a special situation there's nothing to stop you ignoring the built-in provision and building a routine from scratch.

PAW comes predefined to know 106 words, which are divided into two types: conditions and actions. The 28 conditions are keywords which perform a test of some sort (rather like IF in BASIC) and cover questions such as the current position of the player or a particular object, whether or not an object is currently worn, carried or hidden in a container, what the player has typed in and the state of the 'flags' – the various counters and variables that you need to hold details as the game progresses. Random factors can be checked as can the length of time elapsed since the player's last input.

Having tested the state of the game, action keywords can be used to change the situation. Possibilities include getting, dropping, wearing and removing objects, swapping one object with another, creating and destroying objects, or placing them in specified locations. Containers are covered with PUTIN and TAKEOUT commands and most of the object handling keywords also have an 'auto' version to save time and memory.

Up to 255 flags are available of which 60 are used by the system. System flags may be tested and manipulated by the author and their use is clearly documented. Action keywords are available to manipulate the values held in flags in a variety of ways eg. setting, clearing, adding, subtracting and copying. About the only functions not available are multiplication and division.

One very useful keyword is MOVE which allows an independent character to move around the playing area regardless of the player's position. Also available are separate keywords to define and alter both the weight of

# HOME-GROWN FANTASIES

Bored with commercial adventure games? Pat Winstanley looks at a new package to help you write your own.

individual objects and the player's strength.

The screen display can scroll continuously or clear as each new location is visited. You can arrange to give your player both 'brief' and 'verbose' descriptions as required. Four different 'What now?' type prompts are available and can be changed at will.

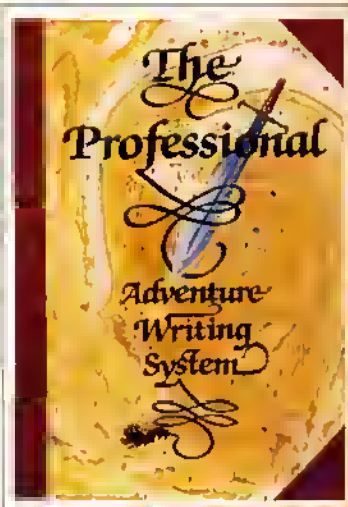
TIMEOUT allows the game to be played in 'real-time', ie. you can set a time limit for your player to respond in – very handy if you want to add a bit of urgency to the gameplay. Also available are various keywords to control formatting, listing of text etc. and a very handy feature which allows a special symbol to be inserted into messages which during play is replaced by the description of whatever object is currently being manipulated.

Saving and restoring the game position is available both to disc and the internal memory, and implementing an OOPS command (whereby you allow your player to undo his last move) couldn't be easier.

### Getting it together

The PAW package consists of a text editor which is used to type entries for messages, location descriptions, conditions etc., a compiler to turn the ASCII text so produced into machine code and a run-time system which runs the compiled code.

Compiled systems like this have advantages and disadvantages. Typing lengthy location descriptions is simply itself as the writer can edit quickly and easily using



## What is an adventure?

Adventure games, which are what PAW produces, are one of the oldest forms of computer entertainment. Essentially they are programs containing a large database of location descriptions and character details. Typically these follow Science Fiction or Fantasy themes such as magic, wizards, monsters, spaceships and so on.

The player has to solve a series of puzzles – set by the game designer – to reach some goal like rescuing a dragon from a ravening Princess. This usually involves travelling through various places collecting treasure,

weapons and so on.

The player runs the game by typing in commands in pseudo-English, like 'Go through door and pick up lantern.' The better the game, the more complex the sentences it can understand. The language understanding part of the program is called the 'parser', which is actually a bona fide English word, not computer jargon!

Among the many well-known commercial adventure games on the PCW are *Hitchhiker's Guide to the Galaxy* and *The Pawn*.

## Not cricket?

Perhaps you feel there's a suspicion of cheating in using an adventure writing system rather than programming the whole game from scratch? If so, you can set your mind at rest. All the big software houses use adventure writing systems as the basic framework on which each individual plot is hung. Intocom, Ram Jam, Level 9 and Magnetic Scrolls each have their own in-house system.

Although these systems aren't on open sale they are sometimes made available to writers developing games for a specific company and work in much the same way as publicly available systems such as PAW. The

existence of these systems is the reason why games from a particular software house tend to have similar characteristics of text, screen layout etc. despite using widely differing scenarios.

In many respects PAW is as powerful as the various software houses' own systems, but of course this doesn't necessarily mean that you can immediately write adventures to their standard. The whole skill in creating an adventure is, like writing a play, in the planning, plotting and characterisation. Actually coding it into a program is the least creative part.

a normal wordprocessor, but testing and debugging can become a bind. In order to test the effect of changing a single figure in a condition the whole source file must be compiled and re-run, an operation which can take several minutes when the tiles get large.

And talking of text editing, the editor provided in the package is very basic and not conducive to fast work. It possible a separate word processor should be used, such as Protext. The PCW's RPED editor can only handle 200-line files, which isn't enough. You can get by with LocoScript as long as you make an ASCII file of your documents, but changing from CP/M to LocoScript to edit files and back again is a real pain.

## Room to ramble

On the PCW you have around 60k of free memory to fit your game into. This can be supplemented in two ways: first, by taking advantage of PAW's very efficient text compression option which compresses text by around 40%. In addition PAW contains the facility for jumping out of the main program in order to access additional data held on disc. This procedure requires a modicum of machine code knowledge, so is for more seasoned programmers only. When you think how much text you can store on a floppy disc you can see just how complex your descriptions can be. Data accessed from disc could be extra text and even graphics screens. PAW doesn't have any commands to draw shapes on the screen, but there's nothing to stop clever writers from producing pretty pictures with other utilities and patching them in.

Up to 255 locations may be defined and supplemented with 255 user messages. Also available are 255 system messages, 60 of which are reserved (though they can be edited) while the rest are free for your own use. Even more text space can be obtained if you don't use all the 255 object

definitions available.

Over 250 words of each of 6 types may be defined (and that figure doesn't include synonyms!) which coupled with a powerful parser gives plenty of scope. The parser easily handles inputs such as "Get all. Open the door and go south then get the bucket and look in it.". My only niggle in this department is that the player's inputs always appear on the screen in upper case letters which is not to my taste and can't be changed.

At the time of writing the PCW documentation isn't quite ready. However, it is promised to be very similar in style and content to that produced for the Spectrum version. Assuming this to be the case, two manuals will be provided (the Spectrum versions are around 70 pages each and very clearly written), one for the absolute beginner explaining the construction of an example game provided, with plenty of advice on design and use of facilities. The second manual will give an in-depth view of each keyword, the overall

GET	ALL	NOUN2 DOALL	POCKET 83	:Location 83 is inside pocket ;Get all from location 83
GET	ALL	NOUN2 DOALL	BOWL 82	:Location 82 is inside bowl ;Get all from location 82
GET	ALL	NOUN2 AT DOALL	POOL 55 81	:Location 81 is inside pool ;Location 55 is room with pool ;Get all from pool if at pool
GET	ALL	DOALL	HERE	:Get all in current location
GET	—	NOUN2 AUTOT DONE	POCKET 83	:These entries deal with ;the getting of single objects ;similar to 'all' commands
GET	—	NOUN2 PRESENT AUTOT DONE	BOWL 82 82	
GET	—	NOUN2 AT AUTOT DONE	POOL 55 81	
GET	—	AUTOG DONE		

Here is part of PAW's process tables that you would have to write to create a simple game of objects being manipulated as containers. *list* is a fragment of the resulting gameplay. Text following semi-colons in the table are comments added by the programmer as memory loggers and are ignored by PAW during compilation.

## Pass it on

Because games produced with PAW run under CP/M Plus, they are equally suitable for both the PCW range and the Amstrad GPC6128 computers. All told there are around 1 million machines worldwide that can run PAW adventures, so if you want to sell your PAWEd creations there's a good market.

## PLUSES

- Simple, convenient text entry
- Keywords, objects etc are all user definable
- Games can understand apparently English sentences, not just keywords
- Lots of text storage means vast games possible

## MINUSES

- Debugging is long-winded
- Graphics and external text file access requires machine code knowledge

## RANGE OF FEATURES

### EASE OF USE

## PERFORMANCE

## DOCUMENTATION

## 8000 PLUS VALUE VERDICT

design and flow of the system, technical information for patching in external routines and detailed information on the use of the system flags. Nothing you need except an index will be missing.

## No excuses

Now that PAW is available for the PCW, frustrated adventure writers have no excuse. PAW is easy to learn, quick to get into, and remarkably versatile. All you need is a methodical mind so that you can plan your adventure scenario properly before starting to implement it. With a little imagination, you can now produce games to rival the offerings from Infocom and Magnetic Scrolls, with all the extra features to be expected from a top class adventure.

There's still a good deal of work involved to reach that standard, and to be honest although you don't need any programming skills as such you do need the methodical programmer's mentality. You can expect many months polishing to achieve your finished game, but for anyone with a hankering to create original and exciting adventures the PAW offers a ready-built package to cope with the tedious side of things.



CHECK THE REST AND BUY THE BEST

## "MARGIN MAKER"

Single Sheet LOCATOR & ALIGNER for PCW Printer

'Float' paper up to 100gms/m<sup>2</sup> between arms, then release. Full width, non-incremental, move and lock arm setting. All four pitch scales marked.

"... Very well designed, extremely well made. You would expect it to work well, and it does."  
Amstrad PCW Magazine October 87

"... Excellent product. MM3 is by far the best product of its kind on the market."  
Your Amstrad PCW November 87

"... I have two MM3's and just throw the paper at them! — Best buy I have made. Superb!"  
Mr H Drury, Birmingham

**£10.50**

incl. VAT & p+p

REMITTANCE with self addressed sticky LABEL to:-

**"MARGIN MAKER"**

Box 121 Gresham Road, Staines, Mx. TW18 2AJ. England.  
(Overseas add £2.00)

### Accessories for your AMSTRAD 8256/8512



#### PAPER TRAY

£10.00

- two adjustable guides
- replaces the existing lid
- Properly feed in single sheet
- available in different colours
- Full size, easy to use



#### Screen Filter

£17.95

- reduces annoying reflections and flickering
- high quality mesh — easy attachable
- improves contrast
- unique matching frame

The new version second disc drive (FD2) for PCW 8256 now available



FD-2 (2nd disc-drive for 8256) £125.00

RAM-EXPANSION (for 8256) £22.50

COMPLETE UPGRADE £139.00  
(for 8256 (FD-2 + RAM))

PRINTER RIBBON, 2 for £7.50

Each ribbon 14 metres

Upgrades have comprehensive installation instructions

#### AMSOFT PANASONIC MAXELL

CF2 Disks, individually cased, box of 10 £22.00

#### NEW MACHINES

PCW 8256 ..... £285 + VAT = £327.75

PCW 8512 ..... £375 + VAT = £431.25

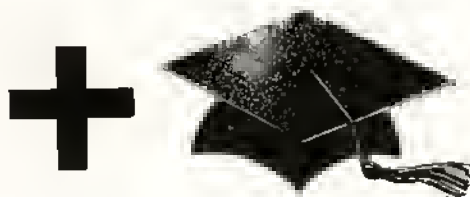
PCW 9512 ..... £459 + VAT = £527.85

All prices inc. VAT and P&P. Please enclose cheque with orders and make payable to:

ALFA Electronics Ltd, Maple House, 97 Ewell Road  
Surrey · Surrey · KT6 6AH. Tel: 01-390 2588

DEALER ENQUIRIES WELCOME

# MASTER YOUR PCW WITH OFFICE INTERNATIONAL



# = PCW MASTER

A PCWORD PROCESSOR PLUS COMPREHENSIVE TRAINING EQUALS:

Comprehensive training in our fully equipped training school an:-

- Lacascript
- Lacascript 2
- Lacospell
- Locamail
- New-ward
- Sage Accounts

Delegates will have a complete Amstrad system plus printer all to themselves. Courses are conducted by our own professional trainers with no more than eight trainees in a class to ensure individual attention.

 **Office  
International**

## OFFICE INTERNATIONAL PCW MASTER

Please return to Office International Ltd.,  
247/257, Euston Road, London, NW1 2HY  
Telephone 01-388 9344

Yes please. I want to become a PCW master. Send me details on your course

Name \_\_\_\_\_

Position \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

Post Code \_\_\_\_\_

Tel. \_\_\_\_\_

YAPCW 12

Circle No 121

# BACK TO BASICS

Starting this month our BASIC-busting series takes the mystery out of type-in listings. At last, write your own programs!

**T**here is one very good reason why you should learn to program computers, which is that it can make life easier for you. Honestly! Have you ever bought a commercial program like a database only to discover that despite the glossy advertisements it doesn't allow you to do the one vital thing you got it for?

If you can master the darkest mysteries of Mallard BASIC then you could write your own database program. This means that you can be sure that the program is *exactly* tailor-made to your requirements. Because you wrote it you will know how it works, so no more rooting around in manuals looking for the correct way to make the printout appear in condensed bold underlined superscript type. And if your requirements do change, you won't need to buy a whole new database system but you can modify your program to suit.

Even if the prospect of writing your own programs from scratch sounds a bit like hard work, a little knowledge of BASIC can be very useful. Most magazines print program listings for you to type in, and inevitably you find again that they don't quite do what you want. If you understand some BASIC you can soon get the hang of modifying the listings to do what you want, not what the original writer wanted.

## Something completely different

To begin to understand how a program is constructed, let's see how to cook Tandoori Chicken Masala:

- Tandoori Chicken Masala - feeds 4**
1. Take 1 chicken and bone it.
  2. Rub some tandoori paste well in and bake for 30 mins in a hot oven.
  3. Make up 1 pint of Masala sauce
  4. In a large pan, warm the sauce and stir in the chicken pieces.
  5. Add  $\frac{1}{4}$  pint of double cream and simmer for 10 minutes.
- Masala Sauce - 1 pint**
1. 4 oz. Tomato puree
  2. 1 fl.oz. lemon juice
  3.  $\frac{3}{4}$  pint warm water
  4. 1 tsp. Garam Masala

Essentially a recipe is a program for chefs, so think what your actions are in the kitchen: the first thing you do is to scan the recipe and make sure you have got the correct quantities of all the ingredients. To feed 8 you will need 2 chickens, lots of tandoori paste, 2 pints of Masala sauce and  $\frac{1}{2}$  pint of cream. Having got these together you then follow steps 1-5 in order.

There's one interesting thing about the way the recipe is constructed, which is that the instructions for the Masala sauce are written as a different block to the main recipe. When you get to step 3 in the main part, you go off to read the instructions for the sauce. You'll need 2 pints, so again double the quantities in the instructions, then follow steps 1, 2, 3 and 4 in the subsidiary recipe. Once all the ingredients for the sauce have been combined, you then go back to the main recipe and carry on from step 4.

If you understood all that then you can understand how to write programs. After all, programs are just a series of steps for a computer to follow, just like the steps in a recipe that you follow.

## Pidgin fancier

Looking at a long program listing can be daunting, but in fact most of the commands that BASIC uses have been chosen to sound as much as possible like ordinary English words. Think of it as a kind of pidgin English. The best way to understand how to program is to look at an existing program, see how it works, and try to modify it.

First, a quick introduction to the most important concept in programming, 'variables'. Look back at the recipe above and consider how you worked out what quantities of ingredients to use. To feed four people you need  $\frac{1}{4}$  pint of cream, but you want to feed eight so you need  $\frac{1}{2}$  pint. What you have really done is to think of ' $\frac{1}{4}$  pint' as the basic unit of cream to work with, and multiplied that by whatever was needed to convert the recipe quantities for the number of people you were cooking for.

It's just like those algebra lessons at school (sorry). "Let  $x$  be the amount of cream needed to feed 4 people, then the amount needed for eight is  $2x$ ," says the old maths teacher. Variables in programming are just like letters in algebra. They are just arbitrary names standing for numbers, like  $\frac{1}{4}$ , or names. BASIC's variables need not be just 'x' or 'y', but almost any interesting name like 'fred', 'cosi', 'cream' and so on, though you can't have any spaces in the middle.

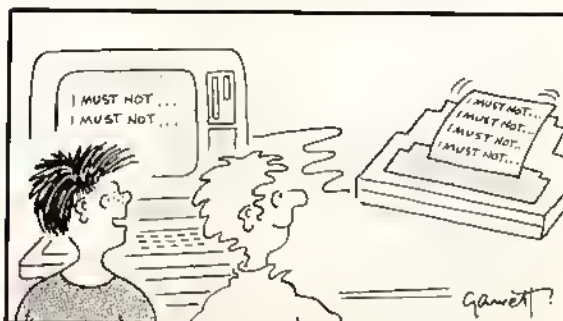
So, have a look at this little program:

```
10 PRINT "What was your mileage at this refill"
20 INPUT newmileage
30 PRINT "What was your mileage at the previous
   refill"
40 INPUT oldmileage
50 PRINT "How many gallons of fuel were needed?"
60 INPUT gallons
70 PRINT "Your MPG is"
80 PRINT (newmileage-oldmileage)/gallons
```

This is a program to perform a miles-per-gallon calculation for your car. It assumes that every time you buy

## Equal opportunities

Mallard BASIC runs exactly the same on 8000 series machines as on the new 9512. The only difference is when trying to do special functions with the printer, but we'll be sure to indicate clearly when that is the case later in the series.



"REMEMBER THE DAYS WHEN WE DREADED GETTING 500 LINES"

fuel you fill up the tank to the top and note down your mileage and how much fuel you bought. The car's MPG is therefore the miles travelled since the last fill divided by the number of gallons just bought.

There are essentially two kinds of command being used here. PRINT "something" is the instruction to make BASIC print whatever is in the double quote marks on the screen (not the printer). INPUT fred is the instruction to make BASIC pause for the user to type something at the keyboard. The user is expected to input his number by typing it followed by pressing the [RETURN] key. Whatever number was typed is stored by the program in the variable referred to in the INPUT command – ie. 'fred' in this case. Variable names are not put in quote marks, but text to be printed literally goes in quotes.

What the program does then is to print on the screen the message 'What was your mileage at this refill', then pause for you to type the number in (a question mark appears as a prompt). The INPUT statement stores this in the variable 'newmileage'. The program then asks you in the same way for your old mileage, and stores it in the variable 'oldmileage', and gallons used, stored in 'gallons'.

Now here's the clever part where it works out the MPG for you. A little maths shows that the MPG is the new mileage minus the old mileage divided by the gallons used, so in BASIC-speak this is (newmileage-oldmileage)/gallons. The last two lines of the program deal with this: first, the message 'Your MPG is' is printed on the screen, then the result of the calculation is printed. Notice how the PRINT statement is used in a slightly different way for this last case: things in double quotes are echoed straight to the screen, but if you put a variable in a PRINT statement its value is printed out. All the MPG arithmetic here is done in the PRINT statement.

```
10 REM A program to calculate your car's MPG
20 PRINT "What was your mileage at this refill?"
30 INPUT newmileage
40 PRINT "What was your mileage at the previous refill?"
50 INPUT oldmileage
60 PRINT "How many gallons of fuel were needed?"
70 INPUT gallons
80 PRINT "Your MPG is"
90 PRINT (newmileage-oldmileage)/gallons
Ok
run
What was your mileage at this refill
? 54.36
What was your mileage at the previous refill
? 52.33
How many gallons of fuel were needed?
? 4.56
Your MPG is
44.51764
Ok
save "mpg"
Ok
```

▲ Typing in and running the MPG listing

## Line numbers

Have a go at typing in the mileage program and running it. Instructions for loading BASIC are in the 'Getting going' box, and you'll also find the 'How to type in a listing' box on this month's Listings pages useful.

Sharp-eyed readers may have spotted the numbers at the left of each line of a program. These numbers just tell BASIC which order the various lines of the program come in. You don't need to type the lines in the order they are printed on the page, since BASIC will automatically sort them into numeric order. So if you find you have accidentally missed out line 20, don't panic – just type it in anyway and it will be put in the right place.

## Getting going

If you've never used BASIC before, you'll be wanting to know how to get going. You would do well to make up a special BASIC disc to work on: using DISCKIT, copy your main CP/M master disc onto a new disc.

This disc is full of files that are nothing to do with running BASIC, so now erase all files except BASIC.COM and J14CPM3.EMS, or J21CPM3.EMS if you have a 9512. (A quick way to do this is to type ERA \*.\*[C] – the PCW then asks you to confirm for each file in turn whether you want to erase it, so press Y for Yes at every name except the two you want to keep, where you press N for No.) This gives you a disc with plenty of free space to store any BASIC programs you may be creating.

This disc will now start up CP/M for you – whenever you want to run BASIC, turn the machine on and put this disc in the drive.

When everything has settled down to the A> prompt, type BASIC [RETURN]. You will see a welcoming message and the the prompt 'Ok'.

The PCW now expects you to type in some BASIC commands for it to do. Whenever articles tell you to "type PRINT "Hello"", do just that – after the 'Ok' prompt, type the line in question then press [RETURN]. If you typed it right, BASIC will do what you wanted. If you mistyped the line it will likely as not say "Syntax error". This is its stuffy way of saying, "I don't understand what you typed."

Whatever you do, remember that nothing you can type will damage the machine or your discs, so don't be afraid to try things out. If things appear to go wrong, press the [STOP] key until you see the Ok prompt, then you can get back to CP/M's A> prompt by typing SYSTEM [RETURN].

CP/M Plus Amstrad Consumer Electronics plc  
v 1.4, 61K TPA, 2 disc drives, 360K drive M:  
A>BASIC  
Mallard-80 BASIC with Jetsan Version 1.29  
(c) Copyright 1984 Locomotive Software Ltd  
All rights reserved  
31597 free bytes

Ok

▲ The welcome message from BASIC when you first start up.

Conventionally, the numbering for lines starts at 10 and increases in tens. Having a gap of 10 between consecutive lines means that you have the leeway to insert other lines later if you want to. For example, if you want to put a line between lines 20 and 30 you would just type 25 PRINT "...whatever", and the line would go in the right place. You could insert up to 9 lines (21 up to 29) between 20 and 30 in this way.

Whenever you type anything at BASIC's Ok prompt, it looks to see whether there is a line number at the start. If so, BASIC just stores the line as part of the program. If there is no line number it assumes that you have typed a command to be obeyed immediately, and it will try and do it. So, typing PRINT "Hello" will have the immediate effect of printing 'Hello' on the screen, whereas typing 10 PRINT "Hello" will apparently do nothing. However, if you now type LIST you will see the line listed out on the screen, and if you type RUN then the command will be obeyed.

You could try typing in some of the listings in this month's Listings pages. Even if you don't understand exactly how they work, all will be revealed in next month's exciting instalment. Watch this space.

EXIT

## Arithmetic

Remember how you used to write sums out at school? Like  $2 + 2 = 4$ ,  $10 - 5 = 5$ ,  $5 \times 4 = 20$ ,  $20 - 1 = 19$ ? Computers are pretty good at arithmetic, and knowing how to do such calculations is quite useful.

Unfortunately the + and x symbols are not on most computer keyboards, so the alternative symbols / and \* are used. So, to work out the four sums above you'd do PRINT 2+2, PRINT 10/5, PRINT 5\*4, PRINT 20-1.



## INVEST WITH PRO-PUNTER

- ★ **PRO-PUNTER** is a sophisticated, disc-based expert system which **ACCURATELY** interprets horse racing form.
- ★ In extensive trials over both **FLAT AND NATIONAL HUNT** seasons:  
57% of horses top-rated by **PRO-PUNTER** won, representing an average post tax **PROFIT** per race of 80% or capital invested.  
85% of winners came from within the top three rated, representing an average post-tax **PROFIT** per race of 18%, all three backed.
- ★ Researched and developed over three years, **PRO-PUNTER** uses information from the racing press and analyses **ALL** major aspects of racing form.
- ★ Produces a **RACE FORECAST**, generates a **COMPUTERS P.**, highlights good and poor **VALUE BETS** and **OFFERS INVESTMENT ADVICE**.
- ★ **PRO-PUNTER ADJUSTS** automatically to the race under analysis. You don't need to be an expert yourself.
- ★ **THIS IS A NEW PRODUCT.** Please do not confuse it with previously available, simple or user-adjustable 'formulators'. Results have been phenomenal. We believe **PRO-PUNTER** to be **THE** "state of the art" racing program.
- ★ Since its launch in May 1987, proofing to the racing press has shown a profit of over £500 to a £10 level stake, tax paid, on all top-rated selections.
- ★ **PRICE £57.50** including VAT, P&P. Orders and enquiries to **DATA SOFTWARE, 3, 1000, BOX 30, ASHTON-UNDER-LYNE, LANCs. OL7 9AJ.**  
+ PLEASE SPECIFY MACHINE WHEN ORDERING +

ab Intra Software

## WHEN YOU BECAME COMPUTER LITERATE YOU TAUGHT YOURSELF MORE THAN YOU REALISE!

I-Ata Software takes your computer literacy into your daily life.

Tranquillity, Influence, Health, Wealth and Success IS your Out-Print.

Start using your Personal Database, Spread Sheet, and Ram - NOW - with your own personal Mouse. Make your own Wimp for Wealth. Regress your Age to your best years.

**START NOW**

by sending your cheque for £39.50 which includes VAT and P/P to:

**ROBERTS FRANKLIN ASSOCIATES LTD.**

(Founded in 1816)

Leazes Crescent, St. James's, Newcastle upon Tyne, NE1 4LN

State which Amstrad PCW8256 or Amstrad PCW8512 is in use and allow fourteen days for delivery

## ALL OUR PRICES INCLUDE CARRIAGE & VAT

**HSV COMPUTER SERVICES LIMITED (8000)**

23, Hampstead House, Town Centre, Basingstoke, RG21 1LG

### Continuous Stationery

9.5" x 11" GSM Micro-Perf all edges  
True A4 90 GSM Micro-Perf all edges  
True A4 100 GSM Micro-Perf all edges  
(coloured-Cream, Blue, Grey or White)  
Labels 3.5" x 1.5" (1 across)  
Labels 4.0" x 1.5" (1 across)  
Labels 4.0" x 1.5" (2 across)  
Labels 2.75" x 1.5" (3 across)

	250	500	1,000	2,000
-	-	£ 4.95	£ 8.95	£ 14.95
£ 5.25	£ 8.75	£14.95	-	-
£ 7.95	£14.95	£27.95	-	-
-	£ 2.95	£ 4.95	£ 9.50	-
-	£ 3.25	£ 5.50	£ 10.50	-
-	£ 3.75	£ 6.50	£ 11.95	-
-	£ 2.75	£ 4.50	£ 8.50	-

#### Dust Covers

CPC 6128 2pce Set = £7.50

PCW 8256/8512 3pce set

= £8.95

PCW 9512 3pce Set = £9.95

Strong water-resistant,  
anti-static nylon

Grey with Royal Blue piping.

**AMSOFT 3" disks 1 = £2.50, 5 = £11.95, 10 = £22.95**

### 3" DISCS NEW LOWER PRICES

#### Disk Storage Boxes

3" Hinged Lid - 10 cased

3" Lockable AMS20 cased

£5.95

£10.95

**Credit Card**

**Hotline (0256) 463507 Faxline (0256) 841018**

#### Printer Ribbons

PCW 8512/8256 Black	£3.95
NEW PCW 8512/8256 Carbon	£5.50
PCW 8512/8256 Colours ★	£4.95
PCW 9512 Black	£4.95
NEW PCW 9512 Colours ★★	£4.95
DMP 4000 Black	£6.95
DMP 2000/3000 Black	£2.95
NEW DMP 2000/3000 Colours ★	£3.95
★ Red, Blue, Green, Brown, Orange, Purple	
★★ Red, Blue, Green, Brown	



# LANGFORD'S PRINTOUT

In which science fiction author and PCW owner David Langford presents some monthly musings for budding writers



## COMPUTERISED PLOTS TO AVOID

A computer is a pretty science-fictional object to have around, so science-fictional that few SF writers caught on to the potential of a home terminal until the things were everywhere. Writers tended to prefer walking, talking, menacing robots and androids, which offered better drama. If Victor Frankenstein had merely stitched together a small word-processing system, his life would have been far more tranquil....

Faced with the challenge of setting SF in the complex, computerised tomorrow which seems inevitable, some writers retreat into fantasies of a primitive past or post-holocaust future where the only software problem for the lur-jockstrapped hero is working out where in the opposition's tummy to insert his pointed stick or four-foot broadsword. Others try to tackle the implications, sometimes successfully and sometimes with mind-numbing corniness. Computers and artificial intelligence have already spawned dozens of plot devices and run them so far into the ground as to evoke coarse laughter from editors you might

have hoped to impress. Here are a few randomly selected storylines to avoid. Some of them worked once, but not any more.

### Ten guaranteed sf duds

- All stories in which your Amstrad PCW is upgraded and becomes God. This brand of SF, known to aficionados as the shaggy god story, is particularly bad when treated seriously ("In the beginning was the word processor," etc.) or humorously (with the serpent of Eden turning out to be Alan Sugar).

- All plots wherein an insane, villainous computer intelligence is caused to sprain its operating system and go up in smoke when confronted with logical paradoxes (SF hero: "Everything I say is false!" World-dominating electronic brain: Fzzzzzt....), emotional tripe (SF heroine: "There are limits to your power, Machine! You cannot love... or weep." Mad computer dies of embarrassment) or plain dumb questions (Patrick McGoonan in *The Prisoner*: "Why?" Collapse of hyperintelligent computer complex, which might reasonably have come back with

"Why not?").

- Any trick ending involving the final death-or-glory battle of a vast spacegoing attack fleet which fights against virtually impossible odds to penetrate savagely hostile planetary defences, and which finally smashes apart the opposition and reaches ground level, only for Time to stop and vast glowing letters to appear in the sky, saying GAME OVER - INSERT COIN.

- In an unsubtle reversal of the previous item, teenage computer-game addicts notching up colossal mega-scores in *Manic Space Goat Attack* find out that really they're operating remote-controlled weaponry responsible for the last defence of Earth against the ravening Vegan mind-hordes (or vice versa).

- Any plot in which high-tech computer hackers penetrate NASA (or Pentagon, or Kremlin, or NatWest) computer security in one paragraph of reasoning going something like this: "H'mm, this system was designed by the great Hasdrubal Bloggs, acknowledged world grandmaster of data security, so our chances of cracking it are pretty slim. Just for a laugh, though, let's try the password HASDRUBAL!" A short pause. "Well, that saves us a lot of trouble...."

- The brilliant idea of your word processor coming alive and electronically taking over the storyline... unfortunately this has been done too often with old-fashioned typewriters to stand being updated yet again. See for example Michael Bishop's nifty novel *Who Made Stevie Cry?*

- Anything with lots of glowing, hallucinatory scenes in which "computer space" is seen as a surreal geography through which hackers travel to battle the deadly electronic defences of the

Pentagon, the Kremlin, Barclays, etc. Quite apart from that flawed film *Tron*, this whole "cyberspace" scenario is the trademark of William Gibson, who's done it three times already (*Burning Chrome*, *Neuromancer*, *Count Zero*), is busy with a fourth (*Mona Lisa Overdrive*), and who's so tempting to imitate that an entire US movement of "cyberpunk" writers has grown around him.

- Anything relying on a new loophole in Asimov's Three Laws of Robotics. Apart, that is, from the really glaring loophole which is mercilessly exploited by present-day computers: they're all too stupid to understand the Three Laws anyway. Adding extra Laws is definitely not cricket, even if Asimov has taken to doing it....

- Any attempt to lend conviction to an SF computer story by writing page after impenetrable page of it in a computer language, either real (especially if it's BASIC) or fake - see *Xorandor* by Christine Brooke-Rose, which also carries computer jargon into everyday expletives. "Booles!" people swear. "Debug!" they vilely continue.

- Any story involving any variation of this dramatic exchange. AGED SCIENTIST OR POLITICIAN: "Well, my friends, this is it! We've put total control over all the world's conventional weapons and nuclear arsenals into the electronic hands of the invulnerably armoured *Deusexmachina* computer complex, thus ensuring universal peace and harmony. It only remains for me to switch on the as yet untested artificial intelligence system, programmed by Dr Barmy Bloodlust just before we fired him, which will henceforth co-ordinate world affairs...." IDEALISTIC YOUNG SCIENTIST OR REPORTER: "I have this crazy hunch that we could be making some mistake!" (But it's too late. Classic example: *Colossus* by D.F.Jones.)

EXIT

### Speaking of Asimov

Every red-blooded SF fan knows Asimov's Three Laws of Robotics: (1) A robot will not harm a human. (2) A robot will always obey a the orders of a human except where they conflict with the first law. (3) A robot will guard its own existence except where that conflicts with the first two laws.

I once devised an alternative, realistic version of the Laws of

Robotics. (1) A robot will not harm authorised government personnel but will terminate intruders with extreme prejudice. (2) A robot will obey the orders of authorised personnel except where such orders would conflict with the Third Law. (3) A robot will guard its own existence with lethal antipersonnel weaponry, because a robot is bloody expensive.

### Hasty disclaimers

This isn't a complete list; for example, I currently suspect that any further attempt to describe an electronic afterlife (people's intelligence transferred to software in vast computer complexes) will have to be incredibly innovative to outdo the treatment of this theme by Rudy Rucker (*Software*) and Frederik Pohl (*Annals of the Heechee*).

Doubtless a writer of genius could breathe new life into some of the moribund themes described here. Just make sure, before you spend too much time trying, that you are a writer of genius.

# AMSTAT & STATMODE

MODULAR STATISTICS AND MATHEMATICS PACKAGES

MARKETED BY

## S. C. COLEMAN LIMITED

AMSTAT for PCW & CPC

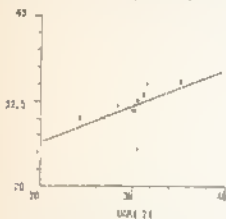
STATMODE for PC Compatibles

AMSTAT 1/STATMODE 1 - means, 11 tests, variance, skew, kurtosis, 1 sample, 2-sample, 1-tailed 1-test, 1-way-ANOVA with single and multi conf. intervals, 2-way-ANOVA, correlation, regression, histograms, scattergrams, transformations, file store and retrieve, output to WP file, manual, flexible variables and observations to a total of 500 (1-1) data points (12000 STATMODE)

AMSTAT 2/STATMODE 2 - 27 nonparametric tests (including 1 "complete Smirnov") Binomial, Chi-square(3), Kolmogorov-Smirnov(2), Runs, McNemar, Sign, Wilcoxon, Walsh, Randomisation(2), Fisher, Median Extension(1), Mann-Whitney, Wald-Wolfowitz, Moses, Cochran, Friedman, Kruskal-Wallis, Contingency, Spearman, Kendall, Kendall partial, Concordance

AMSTAT 3/STATMODE 3: FORECASTING  
An array of business oriented mathematical and statistical software: Linear and Polynomial regression, Trend and Seasonal Variation, Multiple Regression Analysis, Time Series, Exponential Smoothing, Adaptive Filtering, Graphic display, full printout, manual suited to immediate use and for teaching (Additional program for PC)

AMSTAT 4/STATMODE 4: RESOURCE MANAGEMENT - LINEAR PROGRAMMING MODULE  
General Purpose Linear programming - Specialised Transportation and assignment variants. Capable of analysing and solving problems of sequencing, scheduling, blending and allocation of scarce resources. 40 Page manual, 18 worked examples.



AMSTAT 5/STATMODE 5: SFANOVA  
Up to 8-way analysis of variance for equal cell sizes. Unequal cell sizes on 1-way ANOVA. Maximum of 2000 data points (300 on inexpensive CPC-M 2.2, 4000 on PC). Input from ASCII Files. Output to screen or text file with full ANOVA table + main and interaction means and Newman-Keuls on main effects. Manual (10c only).

AMSTAT 7/STATMODE 7: RESOURCE MANAGEMENT II - STOCK AND PRODUCTION ANALYSIS  
Calculation of economic order quantities for both single and multiple items. Dynamic programming to calculate optimum production schedules for single items and consolidation of several results into a multiple schedule. Also Pareto and Lorenz analysis. Output to screen or printer. Includes operational manual with worked examples.

The programs have applications in research of all kinds, education, sales, production planning, work and method study, financial planning, personnel, social work etc.

"I will certainly be using them myself in the future and no reviewer can offer a warmer recommendation than that." Dr. Peter Morris, *Amstat Professional Computing*, May 1987.

Price List	PC	PCW	PC	STATMODE1	STATMODE2
AMSTAT1	£25.95	£27.95	STATMODE1	£29.95	£29.95
AMSTAT2	£39.95	£39.95	STATMODE2	£39.95	£39.95
AMSTAT3	£25.95	£27.95	STATMODE3	£39.95	£39.95
AMSTAT4	£25.95	£27.95	STATMODE4	£29.95	£29.95
AMSTAT5	£25.95	£27.95	STATMODE5	£29.95	£29.95
AMSTAT7	£25.95	£27.95	STATMODE7	£29.95	£29.95

ANY 2 - 15% DISCOUNT  
ANY 4 - 20% DISCOUNT  
Please enquire for Educational quantity discounts

CHEQUES AND P.O.'s  
**S. C. COLEMAN LTD.**  
33 LEICESTER ROAD, ASHBY DE LA ZOUCH  
LEICESTERSHIRE, LE65 5QA

TEL: 0530 415919  
24 Hour Answerphone. Technical enquiries 1 free 5.00pm

## AMSTRAD PCW INTERFACES

3 ins. Discs costing you an arm and a leg  
Then this could be your answer to low cost storage medium.

An Economy 5 1/4 ins 80 track Double sided Double density disc drive for your AMSTRAD PCW. Operates as the standard second disc drive, giving a massive 706K formatted capacity. Easy fitting instructions, no interface, no cutting required.

Introductory offer of only £119.95 inc VAT Plus £2.00 P&P

## \*\*\* RS232C & CENTRONICS INTERFACE \*\*\*

Plugs directly onto the PCW  
Make that vital connection to modems for telephone communications, or talking directly to other computers.  
Allows use of high-quality printers (daisy wheel etc), via the serial or Centronics printers.  
Program-wise it is fully compatible with the Amstrad interfaces.  
The RS output is via a standard 25 way male 'D' connector.  
The Centronics output is via a 34 way edgecard connector as used on CPC range of Amstrad machines.  
Supplied fully cased. Case size: 4.5ins. wide x 1.5 ins. high x 3 ins. deep.

... ALL THIS AT A PRICE OF £45 plus VAT. ...

## CHATTERBOX MODEM

NOT A BITS and PIECES SYSTEM... THIS IS A DEDICATED MODEM

Plugs directly onto the expansion port.  
AUTO DIAL and AUTO ANSWER.  
SERIAL and CENTRONICS interfaces.  
Used to connect to other computers and printers.  
SOFTWARE SELECTABLE MODEM BAUD RATES  
BELL 103 300/300 - CCITT V.21, 300/300 & V.23, 1200/75 75/1200  
Complete with Software on discs, scrolling screen & viewdata display.  
Self-contained unit in attractive casing. Size: 6.5" x 3.5" x 1.5".

... ALL THIS AT A PRICE OF £150.00 plus VAT. ...

## 5. 1/4 SILLY PRICED FLOPPY DISCS 5.1/4

Yes for ONLY £9.99 inc V.A.T. you will receive  
25 (40 track Double sided) disc for your PC.

Price includes sleeves and labels.

... COMING SOON HARD DISC DRIVE ...

K.D.S. Electronics. Dept 8, 15 Hill St,  
Hunstanton, Norfolk. PE36 5BS  
Tel: (04853) 2076

# Advantage

(EPI) Fauconberg Lodge · St Georges Road · Cheltenham · GL50 3DT  
Tel: 0242 222307

OUR PRICES INCLUDE POSTAGE AND VAT

## HIGH LEVEL LANGUAGES FOR PCW AND CPC

Members may deduct £2 off each item below. Overseas please add £3 per compiler

* MIX C COMPILER Full Kernighan-Ritchie implementation with tutorial	£29.95
* MIX C SPLIT SCREEN EDITOR Useful companion to MIX C and any compiler	£19.95
* MIX ASM UTILITY Integrate M-80 Assembler into your C program	£8.95
* MIX EXAMPLES - All the tutorial source code typed in ready to compile	£8.95
* NEVADA COBOL - One step compile and run. ANSI 1974 standard. Full manual	£29.95
* NEVADA PASCAL - Floating point, sequential and random indexed file I/O	£29.95
* NEVADA FORTRAN - Random I/O, ANSI X3.9. 1966 Fortran IV. With trace debugging	£29.95
* HISOFT C - Popular compiler with GSX graphics library and ED80 editor	£36.95
* PASCAL 80 - An extensive implementation of Jensen/Wirth with ED80 editor	£36.95
* FORTH - Fast compact compiler with GSX graphics and screen editor	£19.95
* ZBASIC - Advanced and powerful BASIC compiler with debugging support	£39.95
* DEVPAC 80 V2 - The latest assembly language development tool from Hisoft	£36.95
* KNIFE PLUS - Disc sector editor, damaged disc recovery, Drive A or B + 9512	£18.95

## DISC SOFTWARE FOR PCW & CPC

The best from the Public Domain, tailored for Amstrad computers and fully documented by Advantage. Each disc has menu selection and sorted directory. Members may deduct £1 off the price. Overseas please add £1.

## APPLICATIONS

* TEXT EDITOR Easy to use full screen editor with automatic word-wrap, page breaks, printer control. Generates ASCII files - ideal for compiler source code	£7.00
* DATABASE A relational database suitable for storing simple data and producing reports and forms letters from the data. Free format query language with macros and commands. Features on-line help. Disc also contains an Inventory Database	£7.00
* FIXED ASSETS LOG Record up to 350 items and their value. Useful for home inventory, insurance, stock taking control. Includes forms management and sort routine	£7.00
* VIDEO CLERK Keep track of your video collection with this powerful database system. Features 4 sort options and forms management plus extensive documentation	£7.00
* STD CODEBOOK All the UK codes in numeric order with corresponding exchanges	£7.00
* PCW DESKMASTER Desk-top appointments calendar, calculator, memo-writer, card file database. Disc includes label printer, home accounts, mortgage calculator, weather forecaster, upgrade for drive M, window generator	£7.00
* PCW GRAPHICS User-designed graphics drawing program, screen font designer + ready-to-use font sets. Biomorph - fascinating graphic demo of natural selection	£7.00
* COMMUNICATIONS UKModem7 for CPC and PCW, Kermit, Mex and utilities	£7.00

## The Advantage policy:-

- \* All advertised items are normally in stock
- \* We aim to despatch all orders by the next working day
- \* We refund payment if you are not satisfied for any reason

Order by post or telephone. We accept Sterling cheques, Access & Visa. Please send a SAE with all enquiries. Remember to state which computer you are using.

## UTILITIES

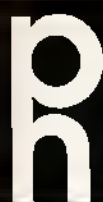
* COMPLEAT UTILITIES - Newsweek - one-key erase copy rename print SUPERZAP disc editor - edit by sector or file; UNERASE erased files; Diskii A - multi-choice disc formatter, offers 178k data format for PCW and S.25" second drive formatting; Read/write PCW discs on CPC; Screen Dump; Password; Easy lister and more	£7.00
* TEXT PROCESSING Sideways - Prints text, eg Spreadsheet, on it's side; Sort any ASCII list into alphabetical order; Word Count; WSClean - removes higher order bits; Calendar Generator; Simple Spelling Checker with starter dictionary and editor; Scoring card generator; Banner printers, Typewriter Emulator	£7.00
* DISC ORGANISATION - Catalog your disc collection and produce printed index; Library utilities for archiving and saving disc space; File dating system; Squeeze and Unsqueeze file compression for saving up to 40% disc space	£7.00
* CP/M V2.2 SELECTION - For CPC464 users. File Manager; Compare; Find; Disc Sector Editor; Key Definer; Bad Sector Eliminator; Grep; Full Screen Text Editor; Easy Lister; File Transfer Utility; Unerase files and many more	£7.00

## PROGRAMMING

* THE Z80 PROGRAMMER - Z80 Assembler/Disassembler, Z80 Debugger, Z80 Library, 8080 Disassembler, Z80 to 8080 translator and associated utilities	£7.00
* THE C PROGRAMMER - The Small C Compiler by Mike Benson. Includes source code and 25k of documentation. Produces executable .COM files	£7.00
* C TOOLBOX - An assortment of C source programs, with their compiled versions, written for a variety of C compilers	£7.00
* FORTH, STOIC & C Interpreter - For experimenters using these languages	£7.00

## PROGRAMS FOR PLEASURE

* GAMES COMPENDIUM - Chess, Othello, Mastermind, Snake, Spellit, Awan, Life, Goli, Polish, Pong, Maze, Biohyrims, Word Search Puzzle Maker, Tir Tar To	£7.00
* ADVENTURES - The famous Colossal Cave Adventure plus two new games	£7.00
* AMUSEMENTS & DIVERSIONS - 29 games for PCW BASIC. Startrek, Whichword, Lander, 3D Noughts and Crosses, Merchants, Othello, Hangman, Baseball, Civil War, American Football, Maze, Nim, Horse Rares, Blackjack, Spies, Crazy 8 & many more	£7.00



# p&h electronics Ltd

5 THE PARADE • YATELEY  
HAMPSHIRE  
TEL: 0252 871222

24 HR SALES LINE  
0252 878107

22/24 GUILDFORD ROAD  
BAGSHOT • SURREY  
TEL: BAGSHOT 0276 74533  
3 MINS JCT 3 M3

## AMSTRAD SYSTEMS DISCOUNT WITH SERVICE

PCW 8256	290.00	4350	333.50	1640 ECD	750.00	11250	862.50
PCW 8512	385.00	5775	442.75	1640 DD ECD	830.00	12450	954.50
PCW 9512	470.00	7050	540.50	1640 HD ECD	1120.00	16800	1288.00
1512 SD MM	385.00	5775	442.75	DMP 3015	17393	2607	200.00
1512 SD CM	520.00	7800	598.00	LQ3500	30435	4585	350.00
1512 DD MM	480.00	7200	552.00	CPC 484 M	16957	2543	195.00
1512 DD CM	615.00	9225	707.25	CPC 484 C	252.17	3783	290.00
1640 SD MD	475.00	7125	548.25	CPC 6128 M	252.17	3783	290.00
1640 DD MD	560.00	8400	644.00	CPC 8128 C	339.13	5087	390.00
1640 HD MD	840.00	12600	966.00	SPC 128 +2	11739	1761	135.00
1640 SD CD	615.00	9225	707.25	SPC 128 +3	15696	2504	192.00
1640 DD CD	700.00	10500	805.00				
1640 HD CD	980.00	14700	1127.00				

## BOOKS FOR PCW

Advanced Amstrad Basic (Locom)	£12.95
Amstrad 8256/8512 More Wordprocessing	£9.95
Amstrad CP/M Plus	£12.95
Amstrad Comms/CPC/PCW Ranges	£8.95
Amstrad Companion (Mallard)	£7.95
Amstrad Word Processing/PCW 8256	£8.95
An Introduction CP/M Plus on Amstrads	£7.95
Get Started Amstrad PCW 8256/8512	£7.95
Introducing Amstrad CP/M Ass Lang	£9.95
Mastering Amstrad PCW 8256/8512	£8.95
Practical Reference Guide/W-Pro. Amstrad 8256	£5.95
Practical Amstrad Word Processing	£7.95
Practical Logo on the Amstrad	£6.95
Program Your PCW (Mallard)	£6.95
Soft 971-OP Program Guide (Dig Res)	£25.00
User Guide to Amstrad PCW 8256/8512	£10.95
Using the PCW 8256	£9.95
Word Processing Amstrad 8256 (Macmillan)	£6.95
Advanced Amstrad Basic	£12.95
Amstrad Communications CPC/PCW	£8.95
Amstrad Companion	£7.95
Amstrad PCW8256/8512 More than	£9.95
Programming the PCW	£6.95
Step by Step Guide to Locomscript	£4.95
Basic 2 User Guide	£9.95
Locomotive Basic 2 for PCW	£9.95
Operating Amstrad CP/M 2.2	£9.95
Clearly Guides Amstrad PCW	£6.95
Program your PCW (Mallard) 2nd Edition	£7.95
Programming the Z80	£19.95
Z80 Reference Guide	£12.95
Z80 Applications	£15.95
Z80 Assembly Lang. Subroutines	£19.95
Z80 Assembly Lang. Programming	£19.95
15 Hour Wordprocessing on the AMS	£4.95
Get Started Basic + Logo PCW	£5.95
Hitchhikers Guide Artificial Intelligence AMS	£5.95
Pocket Wordstar PCW	£7.50
Using Amstrad CP/M Business software	£8.95
Using Databases on the Amstrad PCW	£8.95
Word Processing on the Amstrad 8256 (Glenlop)	£6.95

## LEISURE FOR YOUR PCW

Cyrus Chess II	£14.00
Lord of the Rings	£18.00
Fairlight	£13.00
Bridge Player	£18.00
Leather Goddesses	£20.00
Zork I	£20.00
Enchanter	£20.00
Winnes	£20.00
Ballyhoo	£20.00
Planetfall	£20.00
Hitchhikers Guide	£20.00
Culturoats	£20.00
French Mistress (Tutorial)	£18.00
Sorcerer	£22.00
The Living Daylights	£15.00
Steve Davis Snooker	£13.50
Guild of Thieves	£22.00
Blackstar	£13.50

Spanish Tutor (Tutorial)	£18.00
3D Clock Chess	£18.00
Strike Force Harrier	£18.00
Scrabble	£17.00
Heroes of Khan	£14.00
Colossus 4 Chess	£17.00
Trivial Pursuit	£19.00
Silicon Dream	£18.00
Leader Board (3D Golf)	£18.00
PSI-5 Trading Company (Space Adventure)	£18.00
Head Over Heels	£13.00
The Fourth Protocol	£14.00
Moonmist	£20.00
Starglider	£20.00
Brian Cloughs Football Games	£20.00
Classic Collection (3 Games)	£13.00

## PRINTER SPECIALS

Amstrad DMP3160	£200.00
Amstrad LQ3500	£350.00
Panasonic KXP1081	£180.00
Panasonic KXP1082	£250.00
Epson LX800	£275.00
Cannon PW1080A	£270.00
Tally MT80 PC+	£200.00
Juki 6000 Daisywheel	£200.00
Juki 6100 Daisywheel	£360.00

## ACCESSORIES UPGRADES

Copy Holder Thingy (fits to monitor)	£6.00
2000 Sheets Listing Paper (P&P £3)	£14.00
4000 Labels (1 across)	£17.00
Disc Storage Box (holds 30)	£12.00
Disc Storage Box (holds 70)	£15.00
Mouse Mat by AMX	£5.00
Electric Studio Lightpen	£64.00
Electric Studio Mouse	£114.00
Electric Studio Digitiser	£92.00
Joystick Controller	£22.50
FD2 Second Disc drive	£149.00
FD2 and Memory Upgrade	£170.00
8256 memory Upgrade	£25.00
RS232C/centronics Upgrade	£57.00
V21/23 Amstrad Modem	£95.00
2 PCW printer Ribbons	£9.00
Cover set (3 piece)	£10.00
Premier Lead Extension	£12.00
Blank 3 inch Discs (10)	£30.00
Blank 3 inch Discs DD for 2nd Drive	£50.00
Aniglare Screen	£24.00
Parallel Printer Lead	£12.00
AMX Mouse MKIII with Desktop	£73.00
AMX Mouse MKIII with Strip Press	£82.00

## AMSTRAD MICRO CENTRES

### TELEPHONE OR VISIT

FAST PHONE SERVICE—48 HOUR DESPATCH ON ITEMS IN STOCK SUPPLIERS TO SCIENTIFIC AND EDUCATIONAL AUTHORITIES

ALL PRICES INCLUDE VAT EXC PC/PCW  
PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE

## PCW SOFTWARE

SAGE	
Popular Accounts	£76.00
Popular Accounts Plus	£115.00
Popular Invoicing	£55.00
Popular Payroll	£55.00
Popular Combo Pack	£115.00
Super Combo Pack	£150.00
Super Combo Pack	£150.00
Data Base	£55.00
Magic Filer	£55.00
Retrieve	£54.00
Chit Chat "Mail"	£55.00
Chit Chat View Data	£55.00
Chit Chat Combo	£76.00
Chit Chat with Modem	£165.00
Combo with Modem	£225.00
DIGITAL RESEARCH	
DR Draw	£45.00
DR Graph	£45.00
PascalMT+	£45.00
CBASIC Compiler	£45.00
CAXTON SOFTWARE	
Cardbox	£50.00
Brainstorm	£39.00
Scratchpad Plus	£50.00
Touch 'N' Go	£20.00
Smart Key	£39.00
Condor I	£85.00
Time Keeper	£45.00
CAMSOFT ACCOUNTS	
Cambase Database	£45.00
Payroll	£45.00
Stock/Invoice/Sales — Integrated	£85.00
Sales/Purchase/Nominal — Integrated	£85.00
Stock/Invoice/Sales/Purchase/Nominal	£135.00
Above modules stand alone	each £45.00
OTHERS	
Superclac 2	£40.00
dBase 2	£89.00
Daybook	£47.00
Realtime Audio Tutor	£9.50
Prospell (spelling checker)	£24.00
Datallow/Mailflow III (mailmerge locoscript)	£47.00
Pocket Wordstar Delux (with Spellstar)	£55.00
Rotate (Print Utility)	£20.00
Tasword 8000	£19.50
Tasprint 8000	£12.50
Tasprint 8000	£14.50
Protext	£75.00
Micro collection Card File Database	£46.00
CSTAM PCW to PC File Transfer	£48.00
Neword	£59.00
Locoscript 2	£18.50
Amor 'C' Programming Language	£48.00
Hiscot 'C' Programming Language	£37.50
Fleet Street Editor Plus	£60.00
Fonts and Graphics PCW	£18.00
AMX Strip Press	£46.00
Mini Office Professionals	£27.00

## MAIL ORDER COUPON

P&H ELECTRONICS LIMITED  
22/24 GUILDFORD ROAD BAGSHOT SURREY GU19 5JN  
Please send me: (or order by letter)

1 \_\_\_\_\_ at £ \_\_\_\_\_ P&P \_\_\_\_\_  
2 \_\_\_\_\_ at £ \_\_\_\_\_ P&P \_\_\_\_\_  
3 \_\_\_\_\_ at £ \_\_\_\_\_ P&P \_\_\_\_\_

I enclose cheque/PO for £ \_\_\_\_\_  
Or please debit my Access/Barclaycard/Visa\* (delete as applicable)

Card Number \_\_\_\_\_ Expiry Date \_\_\_\_\_ Telephone \_\_\_\_\_ 8000 1 88



Access/Barclaycard/Visa Orders welcome  
Credit facilities instant credit up to £1,000, deposit 10% — Visitor only  
PLEASE MAKE CHEQUES/POSTAL ORDERS PAYABLE TO:

P&H ELECTRONICS LIMITED

Or quote your Card Number and Expiry Date please UK CARRIAGE COSTS  
—SOFTWARE & BOOKS FREE—SYSTEMS, PRINTERS—£7.00, ACCESSORIES—£2.00 OVERSEAS ORDERS  
—OVER £15.00 SENT VAT FREE INCLUDING 0% PO ORDERS SENT AT UK RATES Please make all payments  
in Sterling Carriage—Books, Software, Assy—£3.00 per item Systems—£40.00 Disc Drives, Printers—£20.00



# The UPGRADES

The specialist PCW magazine, "8000 Plus" selected our Upgrade as  
**"BEST VALUE D-I-Y MEMORY UPGRADE"** and  
**"BEST VALUE 3 INCH SECOND DRIVE"**

*"Silicon City instructions are clear and concise... you could find it easier than you think".*

The simplest, most comprehensive step-by-step instructions available assume no prior knowledge, experience, or skill.

We supply tested, **TOP QUALITY**, fast (150nS) chips which are jig preformed for ease of insertion — **NO BENDING REQUIRED** — plus a spare 'practice' chip to give you confidence.

Our **"Best Value"** Upgrade Kit is **NOW ONLY £22.95**

*"If you go a stage further and add a second disc drive, you won't need to swap discs at all."*

*"Fitting the second drive is simple enough... Everything other than the drive is already there in your machine: the cables are ready wired and both LocoScript and CP/M software will recognise it automatically once it's fitted... you'll have to try pretty hard to get it wrong."*

Internal PCW8256 DS/DD Second Disc Drive  
 1 Megabyte unformatted (720k formatted)  
 (New improved version, NOT old model) **£119**

Memory Upgrade plus Second Disc Drive **£139**

Supplied with simple, comprehensive fitting instructions. NB You will require CP/M version 1.2, or later to format high density discs. Amstrad will exchange earlier versions free of charge.

PCW 9512 Single Disc Drive (Grey Panel) **£135**  
 (Including our superb installation instructions)



Prices INCLUDE VAT and UK post, normally by return.  
 Send UK Cheques/Money Orders/LA or Government orders to:

**SILICON CITY**

Dept. 8, Wheal Rose, Redruth, Cornwall TR16 5DR  
 Access/Visa orders: Telephone 0209 891141



## CARD FILE IN A MUDDLE? Let CHIBASE help sort it out!

CHIBASE is specially designed and written for the PCW by Chiasma Software

Putting your notes or abstracts on Chibase is really easy, and Chibase helps you to find just the ones you need by means of keywords.

**This is how Chibase could work for you:**

- You can use Chibase to replace an indexed cardfile or notebook. A Chibase record corresponds to a card in the cardfile or a page in the notebook.
- Chibase includes a simple text editor which enables you to enter and amend your record text on the screen. As you type in or amend your record text, you can nominate one or more words as keywords. A single key command nominates the word at the cursor as a keyword, and the word becomes highlighted.
- A single key command causes the edited text to be stored as a record on the database. The keywords will be stored in an index. The software uses the index to find records.
- You can selectively retrieve records by means of an enquiry which is just a list of keywords. Those records which include the listed keywords will be retrieved. You can also retrieve only those records whose keywords include some minimum number of the keywords in the list.

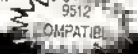
**Some features of Chibase**

- **Fast and easy to use:** No complicated syntax to learn.
- **Free format:** text up to 23 lines of 80 characters per record.
- **Keywords:** up to 15 characters. Up to 50 keywords per record.
- **An Index** of keywords is automatically maintained by the software. You can view or print the index.
- The index can distinguish between upper and lower case characters if required.
- **Form facility,** if required, helps you to position text within the records. Move between parts of the form by pressing the TAB key.
- **Export/Import** facility enables you to move English text to or from your word processor.
- **Amend/Delete** facilities.
- **Sort facility.** (Needs 512K RAM).
- **High capacity** achieved by automatic text compression and true variable length records.
- **Comprehensive Indexed Manual** with tutorial introduction.

**PRICE ONLY £49.99 inc.**

**CWMBRAN COMPUTER CENTRE**

(Dept. EP), 3-4 Ventnor Road, Old Cwmbran, Gwent.  
 Phone: (06333) 40996 or 01-399 9758 (24 hours)  
 Access/Visa welcome  
 Open: Mon-Fri 9.00 - 7.00. Sun 10.00 - 1.00



# HI VOLTAGE

**London's Largest  
 Specialist  
 Amstrad Dealer**

**NEW**

**Amstrad PCW 9512  
 Wordprocessor inc  
 Daisywheel Printer**

**£499 + VAT**

PART EXCHANGE YOUR  
 PCW 8256 or PCW 8512 FOR THE  
 FABULOUS NEW PCW 9512  
 PHONE FOR DETAILS

- Daisywheel Printer
- 512K Ram
- Paper white high resolution monitor
- Spellchecker

USED PCW 8256  
 and PCW 8512  
 GUARANTEED FROM  
**£199 + VAT**

**ADD A DAISYWHEEL  
 PRINTER TO YOUR PCW**  
 Complete Package inc  
 Printer, Printer Cable,  
 Interface, Software. **£249 + VAT**

MASSIVE RANGE  
 OF PCW SOFTWARE  
 AVAILABLE  
 OVER THE COUNTER

Official orders welcomed from PLC's, government and education establishments • Export enquiries welcome.

**HI VOLTAGE**

Dept. 8000, 53-59 High Street, Croydon, Surrey CR0 1QD. Tel: 01-681 3022  
 Mail Order + Export Hot Line Phone 01-686 6362



Owing to a spot of politicking in the PD world (the gory details are in the box), this month's Public Domain choice comes from the libraries of Advantage, who style themselves the 'Independent User Group'.

## User Defined Graphics

Although it may sound like the noise a hedgehog makes as it is crushed by a truck on the A39, UDG (for 'User Defined Graphics') is a program which enables you to redefine any of the standard characters as they appear on the PCW screen, either singly or as a group (called an 'icon'). Right up the street for budding artists and those writing chess or bridge-playing programs.

UDG was written by John Stephenson, and is a hybrid between a BASIC program and assembler. The assembler bits (in a file called UDG.COM) need to be run first of all by typing the command UDG at the A> prompt. After this you then run BASIC and load the remainder (from the file UDG.BAS). The program is menu-driven, and you use the cursor keys in conjunction with the '1' key to toggle parts of the character dot matrix from light to dark. The example here illustrates how the 12 lower-case characters 'a' through 'l' have been redefined to represent one continuous icon of a toy train.

UDG, as all PD programs, is not accompanied by any documentation other than a set of files on the disc which you have to print out for yourself. There is no support service to ring if you get stuck, although you don't need to understand any programming to get going.

UDG permits you to save your modified characters so that you may return to them later, and there is also a mode whereby the characters in question may be stored for automatic loading from CP/M. For example, you could save the character set containing the train as a command file TRAIN.COM which would be run prior to any other program which required to use the train symbols, such as a BASIC program.

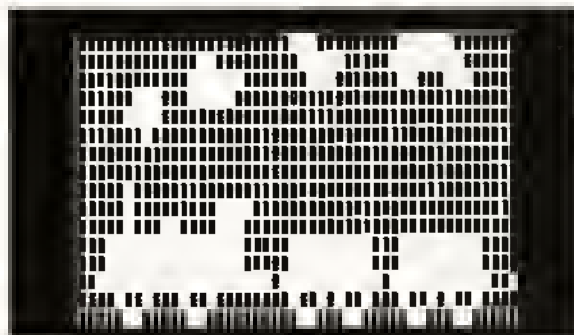
There are three pitfalls to point out:

- 1) Use a different range of characters which don't overlap with those normally used. I chose a,b,c and so on, but when I ran BASIC instead of announcing itself as "Mallard Basic with Jetsam" it said "M(smoke)(train)(train)(smoke)r(smoke)B(smoke)s(train)..."
- 2) Ensure you have plenty of spare space on the disc when storing character fonts. UDG is not clever enough to check for disc full errors, and would only write half a character matrix - running the resulting file can crash the PCW.
- 3) The character redefinition only works on the screen - even using BASIC's LPRINT command won't print them out on paper. This is because the printer driver uses a different set of character definitions which are unaffected by UDG. However you can do a screen-dump by pressing [EXTRA] and [PTR] simultaneously (on 8000-series machines only).

EXIT

# PLAYING TRAINS

Adrian Wilkins reports on another batch of near-as-dammit free software, and the clubs and libraries that distribute it.



◀ Designing a new character with UDG

## Still good friends

As users of public domain software will know, there are a couple of different suppliers. The PD SIG ('Special Interest Group') are a major supplier, and have traditionally drawn on the resources of the PDSL (Public Domain Software Library). However, the PD SIG tell that the PDSL's library was becoming more and more cluttered with junk, old versions, and software that would only run on obsolete machines.

Accordingly PD SIG have taken the bold step of setting up their own library from scratch. At the time of writing they have only just published their initial catalogue for IBM

PC compatibles, and we have to wait a little bit for CP/M software to reappear from this source. Watch this space in future months.

Rumour has it that - in a separate affair - an American-based public domain outfit called the PC SIG have been causing a spot of bother too. All PD software is catalogued by certain numbers (much as library books are), and the PC SIG has apparently threatened to take action because the PDSL used the same numbering system over here. PC SIG claim their cataloguing system is copyright, so now UK and US users hunting for PD software will have to use different reference numbers.

## Where from?

UDG is just one program to be found on the PCW Graphics disc from Advantage User Group - 14 Falconberg Lodge, St George's Road, Cheltenham, GL50 3DT, phone 0242 222307. Even though the software is Public Domain, to cover admin charges the disc costs £7 or if you are a member (£12 a year) £6.

```
1 FOR I=1 TO 5 : PRINT : NEXT
2 FOR I=1 TO 9 : FOR J=97 TO 102 : PRINT CHR$(J); : NEXT : PRINT "   " : NEXT : PRINT
3 FOR I=1 TO 9 : FOR J=103 TO 108 : PRINT CHR$(J); : NEXT : PRINT "   " : NEXT : PRINT
4 FOR I=1 TO 5 : PRINT : NEXT
5 PRINT "TOY TOY"
6 FOR I=1 TO 5 : PRINT : NEXT
```

After running UDG, ▲ this listing... produces this▼

```

  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲
  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲  ▲▲▲

```

TOY TOY

# LISTINGS

Keep track of the figures with the 8000 Plus DIY spread sheet, and other BASIC goodies.

## Spreadsheet

by Dave Atkin

A spreadsheet is one of those pieces of software that everyone needs, but you only realise how much you need it after you've used it for a while. Here is a spreadsheet that does the essential basics that professional spreadsheets do — the main difference is you don't have cough out £50 for it.

The idea of a spreadsheet is that it acts just like a big sheet of paper on which you are working out complicated computations. It's made up of a grid of cells — each cell is an area of the screen where you can print a number, a heading or a formula. Cells are laid out in rows and columns so you can neatly lay out your data. You can add, subtract, multiply or divide the figures in any cell and add in the headings to make it all make sense.

The real joy of it is that all the arithmetic is worked out automatically and if you change any figure the new totals are worked out — ideal for anything where you might want to try a few 'what if' options.

Select 1)Data, 2)Formula 3  
Enter formula: (B1)+(B2)+(B3)+(B4)

Date	1/2/81	3/2/81	5/2/81	7/2/81	9/2/81	Total	Average
Earnings	101.00	87.00	98.00	45.00	79.00	308.00	77.00
Extrav	23.45	23.45	33.70	99.23	10.23	151.14	61.23

▲ Entering a formula

The cells in this spreadsheet are numbered A to J across the top and 0 to 9 downwards — a 10 by 10 grid. For example cell A0 is in the top left hand corner and J9 is the bottom right.

There are two ways of entering information. You can choose option one (Amend) where you will be asked for the cell number (put the letter first, eg. A2) and then you are asked whether you want to enter 'data' or a 'formula'.

Data is easy. This is just a number or some text which you type. It is copied into the specified cell, and you move on to your next entry. The formula option is for those times when

Select 1)Data, 2)Formula 3  
Enter formula: B

Date	1/2/81	3/2/81	5/2/81	7/2/81	9/2/81	Total	Average
Earnings	101.00	87.00	98.00	45.00	79.00	308.00	77.00
Extrav	23.45	23.45	33.70	99.23	10.23	151.14	61.23

▲ How the data file looks when loaded into the spreadsheet

you want carry out some arithmetic in a cell, like saying cell B3 should be B2 multiplied by 1.15. When you mention a cell name in a formula you should put it in brackets and use the symbols + (add), - (subtract), \* (multiply) and / (divide). Don't leave any spaces in your formula.

For example to add a row of figures you might enter a formula in cell B4 which read (B0) + (B1) + (B2) + (B3). This would take the figures from B0 to B3 and add them together. The total will be printed in cell B4. Then put (B4) / 4 in B5 and you have the average. If you lose track of whether you have data or a formula in a cell just choose option 4 on the menu ('Print cell contents'), put some paper in the printer and the program prints out a hard copy of what is really written in the cell.

Since the values of the cells are calculated in the order A0 to A9, then B0 to B9 ..., J0 to J9, don't make any reference in a formula to cells beyond the current one. If you try to set cell A2 to be H2 times 5, you'll get a nonsense result because H2 isn't known when A2 is worked out.

```

10 c1$=CHR$(27)+"E"+CHR$(27)+"H"
20 DEF FNAT$(x,y)=CHR$(27)+"Y"+CHR$(x+32)+CHR$(y+32):PRINT c1$
30 GOSUB 470:PRINT "1)Amend":PRINT "2)Fetch":PRINT "3)Store"
40 PRINT "4)Print Cell Contents":PRINT "5)End"
50 INPUT "Enter choice ", A: ON A GOTO 110,60,430,480,510
60 PRINT c1$:PRINT FNAT$(1,5)"Enter name of data file ";:INPUT "",a$
70 GOSUB 460:PRINT c1$:a$=a$ + SPACE$(8-(LEN(a$)))
80 b$ = LEFT$(FIND$(a$),8):IF b$ = UPPER$(a$) THEN GOTO 90 ELSE GOTO 30
90 OPEN "I",1,a$:FOR a=0 TO 9:FOR b=0 TO 9:INPUT #1,a$(a,b):NPXT:NPXT:CLOSE #1
100 GOTO 180
110 GOSUB 470:INPUT "Enter Cell number (eg. B2) ",b$:b$=UPPER$(b$):GOSUB 460
120 x=VAL(RIGHT$(b$,1)):Y=ASC(LEFT$(b$,1))-65
130 a$(x,y)="":PRINT "Select 1)Data 2)Enter More Data ";
140 INPUT "",a:ON a GOTO 150,170
150 INPUT "Enter data ",a$(x,y)
160 INPUT "1) Finished 2)Enter More Data ",a: ON a GOTO 180, 110
170 INPUT "Enter formula ",a$(x,y):a$(x,y)=" "+UPPER$(a$(x,y)):GOTO 160
180 FOR y= 0 TO 9: FOR x= 0 TO 9
190 IF LEFT$(a$(x,y),1) <> "." THEN GOTO 410 ELSE x$ = a$(x,y)
200 IF LEN(x$) < 2 THEN GOTO 390
210 sign = (ASC(x$)-41)
220 IF MID$(x$,2,1)="/" THEN GOTO 300
230 g=1
240 g=g+1:IF g> LEN(x$) THEN GOTO 280
250 h= ASC(MID$(x$,g,1))
260 IF h>47 THEN GOTO 240
270 IF h=46 THEN GOTO 240
280 a = VAL(MID$(x$,2,(g-2)))
290 x$=RIGHT$(x$, (LEN(x$)-(g-1))):GOTO 320
300 c=ASC(MID$(x$,3,1))-65:b=VAL(MID$(x$,4,1)):x$=RIGHT$(x$, (LEN(x$)-5))
310 a=VAL(d$(b,c))
320 ON sign GOTO 330,340,350,370,360,380
330 d=ROUND(d*a,2):GOTO 200
340 d=d+a:GOTO 200
350 GOTO 200
360 d=a:GOTO 200
370 d=d-a:GOTO 200
380 d=ROUND(d/a,2):GOTO 200
390 d$(x,y)=STR$(d)
400 d$(x,y)=RIGHT$(d$(x,y), ((LEN(d$(x,y)))-1)):GOTO 420
410 d$(x,y)=LEFT$(a$(x,y),8)
420 z=x*2+10:w=y*9:PRINT FNAT$(z,w)d$(x,y) ":NEXT: NEXT:GOTO 30
430 PRINT c1$:INPUT "Enter name of data file ",a$
440 OPEN "O",#1,a$:FOR a=0 TO 9: FOR b=0 TO 9:WRITE #1, a$(a,b):NEXT: NEXT
450 CLOSE #1:GOTO 30
460 PRINT c1$:PRINT FNAT$(1,5)"Enter name of data file ";:INPUT "",a$
470 PRINT CHR$(27)+"X"+CHR$(30)+CHR$(30)+CHR$(37)+CHR$(120):PRINT c1$: RETURN
480 PRINT c1$:INPUT "cell number";c$
490 a=VAL(RIGHT$(c$,1)):b=ASC(UPPER$(LEFT$(c$,1)))-65
500 LPRIET c$ "a$(a,b):GOTO 30
510 GOSUB 460:END

```

## Do it the easy way

While you can fill up a spreadsheet by entering each cell individually from the 'Amend' menu choice, it is much quicker to type all the data into a file and load it in all at once. To understand this the best idea is to type some data into a spreadsheet and save it (option 3).

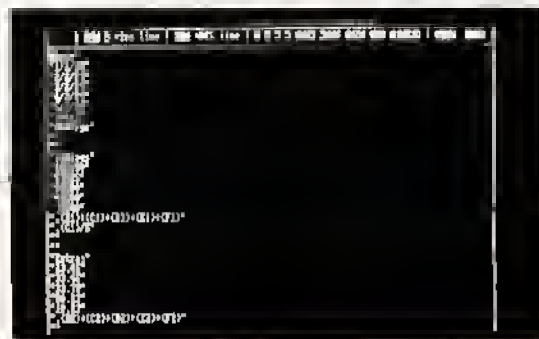
Quit the program and load RPED, the BASIC text editor. (A brief guide on using RPED is in the CP/M manual.) Load the data file you saved your spreadsheet data in, and you will see a list of 100 pairs of double quotes. This represents every cell in the spreadsheet. By noting where the entries come you can see the lay-out — the first lines represent the first 10 cells across and so on. Once you have the hang of this you can just fill in the information here quickly and load the details in seconds. Press [EXIT], and your data is safely saved to the disc.

The spreadsheet's 'Fetch' option can be used to either read a previously stored spreadsheet, or to load a file of data you've prepared in RPED as just described.

You can of course then change the contents of any cell and the computations will automatically change. And if you want to keep a permanent record of your spreadsheet press

[EXTRA] and [PTR] for a screen dump (PCW 8000 series only).

Those learning BASIC might be interested in the way the screen is split in two. This is done using escape codes to set up windows on the screen in line 470, and set back to normal in line 460.



▲ Using RPED to create a data file

# Maze

by Michael Gibbs

34 lines of BASIC may seem a lot for a game but, Maze is out of the ordinary for BASIC listings. For a start it looks really impressive.

The program generates a random patterned maze which you have to cross from left to right. To do this you use the keys A and Z to move up and down and / and \ to move left and right. The first thing you do is choose whether you want to tackle the maze 'blind' or normally. For novices, pick the 'normal' option when you can see all of the maze. In 'blind' mode, for experts only, you can only see the parts you have already gone over!

After you have chosen you will be asked to press the

Space bar. The time you take to press the space is measured to provide a random factor in the choosing of the maze patterns. After this there is a long pause while the maze is calculated. When it finally appears, press one of the cursor keys A, Z, / and \ to make the cursor appear.

You are given a time limit which counts down to zero. If it expires you are back to square one – if you succeed your prize is being allowed to tackle another maze, but in a shorter time. The program also notes how many moves you made to cross the maze.

Because it is more difficult you are given more time to complete the blind maze but one or two experiments at the normal maze quickly proves that that isn't much easier. In fact if you are having difficulty following the way the cursor moves round the maze then running the blind maze first may give you a better idea of how it works.

There are several details about listing in this program for programming fans. The program does do one or two things with the cursor, and when you leave the program you will find the screen in reverse video. Either reset the PCW, or type into BASIC PRINT CHR\$(27) + "e" + CHR\$(27) + "q" to get back to normal.

```

10 DEFINT a-z:q=1:es=CHR$(27)
20 DIM m(2,71,25):bs(1)="I":bs(2)="eeelllm":bs(3)="jjfffn":bs(4)="ccccggn"
30 DEF FNats(x,y)=es+"Y"+CHR$(32+y)+CHR$(32+x):s=0:lv=1:w=70:b=1:z=1:v=1
40 hs=es+"E":PRINT bs
50 PRINT FNats(22,14):INPUT"CHOOSE MAZE TYPE (0 blind maze/1 normal maze)":g$
60 d=VAL(g$):IF d>1 OR d<0 THEN 50 ELSE tt=1500-(1500*(d=0))
70 PRINT es+"I":FNats(33,16):" PRESS SPACE TO CONTINUE "
80 WHILE INKEY$<>" ":u=1+(3*RND):WEND
90 PRINT FNats(33,16):" PLEASE WAIT "
100 FOR y=1 TO 2:FOR x=1 TO 25:FOR j=1 TO u:NEXT
110 m(y,71,x)=ASC(MID$(bs(2),1+INT(RND*7),1))-96:NEXT:NEXT
120 GOSUB 320:IF done=0 THEN 120
130 done=0:t=tt-(150*lv):c=0:w=70:v=1:q=1:z=z+1
140 IF t=700 AND z=3 THEN z=1:q=2
150 IF t<700 THEN t=700:IF z=3 THEN z=1:q=2
160 PRINT hs;es+"p"
170 FOR y=1 TO 25:as="":FOR x=0 TO 70:as=as+CHR$(32+(d*(96+(m(q,x,y))))):NEXT
180 PRINT FNats(9,y+2);as:NEXT:PRINT es+"q":x=0:y=12
190 GOSUB 320:GOSUB 320:GOSUB 320:is=INKEY$
200 PRINT es+"q":FNats(39,1):"TIME ":t;FNats(20,29):"MOVES ":c;
210 PRINT FNats(40,29):"LEVEL ":lv;FNats(60,29):"SCORE ":s;es+"p":t=t-1
220 IF t<1 THEN 280
230 IF is="" THEN 190
240 c=c+1:p=m(q,x,y):k=ASC(is)
250 PRINT FNats(x+9,y+2):CHR$(128+p)
260 x=x+(x=169 AND (p AND 2)/2)+(k=47 AND x>0 AND (p/8))
270 y=y-INT(k=97 AND y>1 AND (-1*(x=0) OR (p AND 1)))+(k=122 AND (-1*(x=0) OR (p AND 4)/4) AND y<25)
280 PRINT FNats(x+9,y+2);es+"q":CHR$(144+m(q,x,y)):t=t-1
290 IF t<1 THEN s=0:lv=1:w=70:b=1:v=1:PRINT FNats(40,12):" GAME OVER ":GOTO 50
300 IF x=71 THEN s=s+INT((70/c)*1000):lv=lv+1:PRINT FNats(40,12):" WELL DONE ":GOTO 70
310 GOTO 190
315 IF done <> 0 THEN 340
320 as=bs(1+((m(z,w,v-1) AND 4)/4)-(2*(m(z,w+1,v)>8)))
325 m(z,w,v)=ASC(MID$(as,1+INT(RND*LEN(as)),1))-96:v=v+1
330 IF v=26 THEN v=1:w=w-1:IF w=1 THEN done=1
340 RETURN

```

0997  
1544  
1549  
0638  
1C0A  
11F1  
136E  
0E48  
087F  
1045  
120C  
09FA  
0F7A  
0868  
0E0D  
0563  
1648  
120E  
0E1A  
152E  
176E  
05F6  
05E7  
09C8  
0C39  
0F84  
1CEA  
1QAA  
1A6E  
1D4G  
03A1  
0E67  
0E43  
1098  
1130  
0388

## Good programs needed!!!

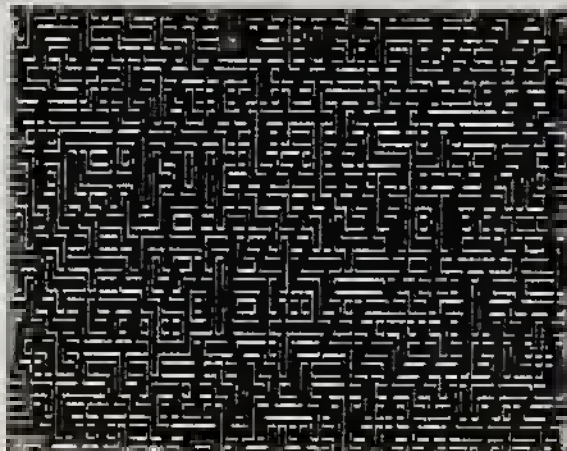
We are looking for well written programs of up to 50 or so lines which we can print in the 8000 Plus listings pages each month. Of course, since we want short listings as well as long, the longer ones will have to be *really* special!

If you can program you could earn hard cash and instant fame by having your program printed in 8000 Plus. Give instructions on an accompanying sheet for using the program, and if there are any useful modifications that readers can make by simple edits to customise the program, mention those too.

To submit a listing you must supply:

1. A printout of the listing;
2. A disc on which it is saved;
3. A stamped, addressed padded bag for its return;
4. An explanation of what it does and how to use it;
5. A signed statement confirming that the program is your own work and hasn't been submitted to anybody else.

Send your listings to *Listings, 8000 Plus, 4 Queen Street, Bath BA1 1EJ*. Please allow up to 40 days for return of your disc – the listings are assessed in a batch once a month.



# STOCK MARKET

**THERE'S NEVER BEEN A BETTER TIME TO BUY!**

STOCKMARKET enables you to practise investment techniques before risking your own money. Start with some money in the bank. Follow the fortunes of shares that interest you. Buy at the best prices. Watch their progress. Update the prices of your shares very simply whenever you want. See their new values calculated automatically. Sell at the right moment. See your profits. STOCKMARKET also comes complete with demonstration data including real price information so that you can plot share prices straight away.

STOCKMARKET enables you to record details of purchases, sales and dividends of shares, unit trusts etc. with automatic calculation and display of all dealing costs. Current share prices can be entered very easily at any time for an automatic folio revaluation. Values of share prices, indexes etc. can be recorded, listed and plotted along with moving averages on a logarithmic or linear scale. As well as tracking your actual share holdings you can practise buying and selling techniques for recovery shares, penny shares, growth stocks etc. with a separate accurately modelled folio for each. See if your intuition is right.

## PORTFOLIO MANAGEMENT

- Record full details of your portfolios of stocks, shares, unit trusts etc.
- Practise buying and selling and accurately record your progress.
- Up to fifty shares per folio. As many folios as you like.
- Buy and sell shares with automatic calculation of dealing costs.
- Ten sets of dealing costs which you can alter as necessary.
- Record dividend yields and price earnings ratios.
- Update prices and automatically update yields and P/E ratios and automatically recalculate individual share and total folio values.
- Record dividend payments and total dealing costs.
- Keep records of your cash as you buy and sell.
- List your present folio, past transactions, dividends and cash accounts.

## PRICE ANALYSIS

- Record values of share prices, unit trusts, indexes, exchange rates etc.
- Store up to 260 prices per share (equivalent to weekly prices for 5 years).
- List out the prices.
- Plot prices and moving averages on a logarithmic or linear scale.
- Automatic scaling of graphs.
- Easy to read scales for prices and dates (not just week numbers).
- Complete with real weekly prices for several shares for the last few years (inc FT 30, British Telecom) as a demonstration.
- Use curves as a guide to the best buying and selling opportunities.

**Comprehensive forty page manual. Complete with demonstration account and prices.**

**AMSTRAD PC, IBM PC and compatibles  
AMSTRAD PCW and CPC (disc)**

**£49-95**

**£29-95**

**MERIDIAN**  
**software**

Prices are all inclusive worldwide. Send cheque or credit card number or telephone for immediate delivery by first class post.

38 Balcaskie Road, London, SE9 1HQ. Tel: 01-850 7057



THE ORIGINAL

# EASY LABELLER

**PURPOSE DESIGNED TO SOLVE ALL YOUR LABELLING NEEDS  
NO FILES — NO FUSS — VERY FAST — EASY TO USE**



**24 HOUR  
ACCESS  
ORDERING  
SERVICE**

## PROGRAM FEATURES

- Instant automatic sorting
- Prints single labels
- Prints multiple labels
- Prints labels by category
- 99 numeric categories
- Different on line print styles
- Up to 1000 labels on disc
- Any size labels catered for
- Any number across the page
- Date stamping
- Serial numbering
- Label coding
- Full on screen editing
- Command driven
- Over fifty commands
- Find text and change
- Find text and print
- Instant access to a
- On screen help
- Set all margins gaps
- Pause printing between
- Printouts in listing form
- Scan labels for easy use
- Unlimited non print information
- Multiple data disc capability
- Test print for setting up labels
- Test patterns
- USE WITHIN MINUTES
- Plus lots more!

## MORE PROGRAM FEATURES

- Start all printouts from a particular label
- Labels printed any number of times
- New disc generation
- Serial number formatting
- Serial number step selling
- Program help in memory
- Program written in hi-speed
- Date checking with
- Plus more

## WHAT THE PRESS SAID

*Naming a product is often a difficult task but in the case of EASY LABELLER the name says it all*

**.. NEW VERSION LABELLER 3.5 ..**

- Read and Write ASCII files from 10 other programs
- Add labels in batches for super fast
- Rename labels
- Copy labels
- Change on-block
- Shows labels used
- Conditional
- Status command
- Updates to existing users only £5.00 + V.A.T. (original disc £10.00)
- Extra reduced entry commands
- Searching and more!

**AVAILABLE FOR THE AMSTRAD PCW and ALL PC COMPUTERS**

Fred Perry Sportswear  
Michelin Tyres  
Boots the Chemist

**ARE ALL EASY LABELLER CUSTOMERS!**

## ADDRESS LABELS

89x36 mm 1 or 2 wide			
	2000	4000	8000
Nett	9.00	17.00	32.00
V.A.T.	1.35	2.35	4.80
TOTAL	10.35	19.35	36.80

Other sizes are available

**£29.95** + £4.49 VAT

M.A.S.S. FREEPOST (8000+ Feb)

53 DERHAM ROAD  
NORWICH  
NR2 4BR

TEL (0603) 830768  
No stamp required

PLEASE STATE  
COMPUTER TYPE

## A DEMONSTRATION PACK FOR £5.00 + V.A.T.

EASY LABELLER is available from more and more retailers but should you encounter any difficulties in obtaining your copy then feel free to order direct. If you would like to see the program before you purchase then take advantage of our demonstration pack offer. The program is fully functional but the number of labels is restricted and all output is to the screen. A demonstration pack is available for £5.00 + V.A.T. and is refundable against a full working version.

PLEASE NOTE: EASY LABELLER is a purpose designed program and NOT a database adaption. The need to deal with disc files is NOT REQUIRED. THOUSANDS of satisfied customers, both experienced and first time users, have found EASY LABELLER invaluable for producing MAILING LISTS, TICKETS, CONTINUOUS ENVELOPE ADDRESSING as well as a QUICK and EASY filing system.

# PCW Prompt

by T.J. Rochester-Farrell

For anyone who really wants the PCW to organise their life, here is the ultimate program. You can type in your busy schedule with times when you have to do various important tasks (like 8pm WATCH DALLAS) and then as long as you don't switch the PCW off or use it for any other purpose, the program will remind you at the correct moment.

First you have to set the PCW clock to the right time. You can do this using the ordinary CP/M utility DATE.COM as found on your CP/M discs (type DATE [RETURN] at the A> prompt and follow the prompts).

Then run the alarm program. When prompted just type in

```
10 esc$=CHR$(27):c1$=esc$+"E"+esc$+"H":on$=esc$+"e":of$=esc$+"f":PRINT c1$
20 DEF FNat$(x,y) = esc$+"Y"+CHR$(31+y)+CHR$(31+x)
30 PRINT "      TYPE MESSAGE      ( up to 255 characters inc. spaces )
40 PRINT : PRINT "          ENTER x FOR TIME TO FINISH"
50 PRINT : PRINT "          ENTER TIMES AS 24 HOUR" : PRINT
60 INPUT "NUMBER OF MESSAGES REQUIRED ";n
70 FOR q = 1 TO n
80 INPUT "MESSAGE ";a$(q)
90 INPUT "HOUR ";h(q)
100 INPUT "MINUTE ";m(q)
110 NEXT
120 PRINT c1$
130 PRINT of$
140 FOR Q = 1 TO N
150 PRINT h(q)" "m(q)" "a$(q)
160 NEXT
170 FOR u = 1 TO 2222 : NEXT : PRINT c1$
180 DEF FNt(x) = x-INT(x/16)*16
190 FOR t = 1 TO n
200 WHILE h(>)h(t) OR m(>)m(t)
210 h = FNt(PEEK(64502'))
220 m = FNt(PEEK(64503'))
230 s = FNt(PEEK(64504'))
240 PRINT FNat$(5,5) h m s
250 WEND
260 IF a$(t) = "x" OR a$(t) = "X" THEN 350
270 WHILE INKEY$=""
280 PRINT CHR$(7)
290 OUT 247,240 : OUT 247,240
300 FOR a=1 TO 500: NEXT
310 WEND
320 PRINT FNat$(12,8+t+t)" DON'T FORGET AT "h" "m" "s" "a$(t)
330 FOR e = 1 TO 1111 : NEXT
340 NEXT t
350 PRINT of$ : SYSTEM
```

11 30 0

DON'T FORGET AT 11 30 0 Have a cup of coffee

A>

the number of messages you require and enter the message, the hour and the minute you require for each of the alarm calls one after the other. The PCW will show the time on the screen and at the correct moment it will bleep and flash away at you until you press any key. Then you will see your instructions printed on screen. You can use messages of up to 255 characters (including spaces) so the instructions can be pretty detailed.

## While you're away

The ultimate gimmick though is that you can use it to run programs on your PCW while you aren't there! By entering an x as your last message, instead of bleeping the program pauses until the time that you specify, and at the appointed hour exits to CP/M.

If you were to write a Submit file (say called ALARM.SUB) containing first the line BASIC ALARM and then on the next line the name of any program you wanted to run in CP/M, you could set up the program to run in the middle of the night. You will need SUBMIT.COM, BASIC.COM, the CP/M program you want to run and the BASIC alarm program on the disc in the drive.

Type SUBMIT ALARM.BASIC will load and the alarm program will run. Type in x when asked for the message, and the time when you want the next program to start. Then go away. When the correct moment arrives the alarm program closes BASIC down and returns you to CP/M and the rest of the Submit file is run, ie. your CP/M program.

This might well be useful for someone wanting to use a modem in the middle of the night when the phone rates were cheaper, or just to surprise somebody late at night!

## How to type in a listing

Load up Mallard BASIC - at CP/M's A> prompt, put the CP/M master disc in and type BASIC [RETURN].

Now you see the 'OK' prompt. Just type in the lines of the listing exactly as they are printed on the page, including the line number at the start, but not the check number at the extreme right.

The numbers at the right are for use with the 8000 Plus listing checker program, as printed in Issues 10 and 14.

Mistakes made before you press [RETURN] can be corrected with the [DEL] keys, otherwise you will have to use the editor. Suppose you have made a typing error in line

100: type EDIT 100 and then you can use the cursor keys and [DEL] keys to correct it. Press [RETURN] when the line is alright.

When you've finished, save the program to a disc by the command SAVE "FRED" (choose your own appropriate file name instead of FRED). To run the program, type RUN.

Programs rarely run first time, but when BASIC encounters a mistake it tells you roughly what line the error is on. Use the EDIT command to correct it.

You can rerun the program another day by loading BASIC up and, with the disc you saved the program on in the drive, LOAD "FRED" then RUN.

TYPE MESSAGE ( up to 255 characters inc. spaces )

ENTER x FOR TIME TO FINISH

ENTER TIMES AS 24 HOUR

```
NUMBER OF MESSAGES REQUIRED ? 3
MESSAGE ? Have a cup of coffee
HOUR ? 11
MINUTE ? 30
MESSAGE ? Go out for lunch
HOUR ? 12
MINUTE ? 30
MESSAGE ? x
HOUR ? 15
MINUTE ? 30
```

# PCW 8256/8512/9512



## 0-56 IN 13 SECONDS!

The PCWHD20 will put both sides of 56 Floppy Disks on line in just 13 seconds from turning on the power!

*Fully Locoscript II compatible.*

### ASD PERIPHERALS

TAKING THE PCW COMPUTERS TO THE NEXT DIMENSION

PCWHD10 rrp £299 + VAT PCWHD20 rrp £465 + VAT LOCOSCRIPT II rrp £19.95 inc VAT

TEL: 021-359 0981 - TELEX: 334535 BMTEC G FAX: 021-359 0433

ASTON SCIENCE PARK, LOVE LANE, ASTON TRIANGLE, BIRMINGHAM B7 4BJ

## THE LEARNER FRIENDLY SERIES

### 1 FIRST BASE (PCW and PC versions) £29.95

A simple to use introductory database. Design your own record card on screen in minutes with up to 250 items of information. Storage is disc based so it is not limited by the memory. A Help Panel is included for new users. Records are kept in constant sorted order and are instantly accessible by name or number. Manual or automatic search options and facility to re-sort the file. Mailmerges with Locoscript and outputs ASCII files. Reports and totals. Example uses are mail lists, stock inventories, booklists, client information and much more.

### 2 LERNLOCO (PCW) £16.95

A step by step tutorial to gain a full understanding of the LocoScript wordprocessor. Many exercises are included to give experience and confidence. Users soon gain confidence and even create their own personalised manual!

### Other Software for the Amstrad CPC 464/664/6218

#### Random Access Database £29.95

Powerful, versatile, random access database. Finds records in seconds not several minutes. Multiple print formats, min 80 & 40 character text or boxes in design. Extensive calculations including SIN, LOG, COS, etc. Comprehensive search and sort facilities. 40 fields per record.

#### Instant Access Utilities £29.95

A full range of utilities including random access, sector editing, error handling, etc. Simple RSX commands interface directly with the resident BASIC. A powerful EXEC command allows a BASIC statement to be executed from within a program to evaluate calculations.

### 3 TYPERITE (PCW) £17.95

A comprehensive yet easy to learn touch typing course based on the famous Pitmans method. It has been designed to teach the correct method for the skill of fast, efficient typing. The emphasis is heavily placed on rhythm and accuracy rather than testing by speed at an early stage.

### 4 FIRST CALC (PCW, CPC6128 and PC versions) £29.95

A simple to use spreadsheet yet contains many facilities available on much larger systems. Full maths capabilities including average, count, max., min. and total. Calculate in both horizontal and vertical directions to an accuracy of 14 significant figures. Portions of a sheet may be copied, printed, saved or loaded with either automatic relative or absolute reference adjustment. Useful for fast and effective cashflows, home budgeting, statistics and even stocks and shares.

*"This is not just a beginner's program it contains enough sophisticated features to suit the needs of most people". 8000+ July 87.*

*"First Calc performs admirably, the price is unbeatable and it's simple to use." Amstrad Action. Sept. '87*



**MINERVA SYSTEMS,**  
69 SIDWELL STREET, EXETER,  
DEVON, EX4 6PH. Tel: 0392 37756

## PROFESSIONAL BUILDERS ESTIMATING SYSTEM

Automatically calculates neat printouts of costs, material quantities, and times. Incredibly easy to use. Superfast intelligent input routines save hours of estimating time. Specially designed for the smaller firm. No data to install — ready to go.

For factsheet and sample printout ring  
(0387) 88612 Tony Moseley or  
(0387) 54547 John Donnelly  
Any time

**PCW Version**  
**£99**  
+ VAT  
**MCGREGOR**  
SOFTWARE

## AMSTRAD PCW OWNERS

### \*\*\*\*\* TURF ANALYST \*\*\*\*\*

The horse racing program designed to enable the user to adopt a professional approach to betting.

Uses the knowledge of a professional and the power of your computer to make racing pay!

### THE ULTIMATE IN HORSE RACING PROGRAMS

Price: £29.95 inc.



Cheques/Postal Orders Payable S.J. Timson.  
17 Bosden Close, Bilborough, Nottingham NG8 4HR

## ANOTHER CARD INDEX FILE?

DO YOU NEED A RELIABLE AND EASY TO USE CARD INDEX SYSTEM?

— for only £24.95 —

**REPETITIVE DATA TO ENTER?** C-FILE lets you save and paste-in over 100 standard phrases (each up to 70 characters) with each file.

**NEED TO UPDATE YOUR RECORDS?** 'find and exchange' will run through the file and do the job in one go (either automatically, or confirm each exchange).

**WANT TO PRINT SELECTIVE LISTS?** C-FILE can list from-to 'keys'; it can check up to 10 items for 'greater or less than' or 'equal or not equal to'; you can use 'find' and just list records containing a certain word or phrase. Or you can use a combination of the above, taking up to three different fields into account.

**C-FILE** allows date manipulation; automatic totalling of numeric information, alphabetisation (up to 31 characters) from keys in any field, automatic or manual selection from anywhere in fields, and much more.

**C-FILE** uses a simple menu driven operating system; it comes with comprehensive instructions and example files. There is even a program to produce your own disc labels. And **FREE** postal support is always available.

Write or phone for further details, or send a cheque to

**CS Software (EI)** · 4 Trevanna Road · Kingsbridge · Devon · TQ7 1ET  
Phone Kingsbridge (0548) 6394

# ALADDINK

## FABRIC RIBBON CASSETTE RE-INKING

Trial Offer: £1 per ribbon

Post used cassette(s) with payment to:  
**ALADDINK (Dept BO)**, 4 Hurkur Crescent,  
Eyemouth, Berwickshire, TD14 5AP

Tel: 08907 50965

## THE BUSINESS CENTRE

### ACCOUNTS PACKAGES

Compact Accounts	170.00
Camsort Full System	110.00
Camsort Sales	43.00
Camsort Stock Control	43.00
Camsort Invoicing	43.00
Sage Popular	73.00
Sage Popular Plus	110.00
Sage Combo	110.00
Sage Super Combo	170.00
Sandpiper Accounts	130.00
Map Integrated	110.00
Micro Simplex (8512)	90.00
Money Manager	23.00

### PAYROLL

Compact	54.00
Sage	54.00
Sandpiper	60.00
Sage Paylips (1000)	40.00
Camsort	40.00
MAP	40.00

### STOCK CONTROL

Camsort	55.00
Compact	55.00
MAP	40.00
Anagram	70.00

### DATABASES

dBase II (Union File)	75.00
Cardbox	44.00
Cambase	37.00
Condor I	70.00
Datastore	30.00
Loconall	30.00
Masterfile 8000	40.00
Sage Retrieve	52.00

Pocket Infostar	30.00
Matchbox	27.00

### WORDPROCESSING

Tasword 8000	19.50
Tasprint 8000	12.50
Taspell	14.50
Protext	57.00
Compact Protext	32.00
Pocket Wordstar	36.50
Locoscript 2	18.50
NewWord II	58.00
Locospell	30.00

### SPREADSHEETS

Supercalc II	38.00
Cracker II	36.00
Scratchpad Plus	48.00

### GENERAL & UTILITIES

Comparison	16.00
DR Draw	36.00
DR Graph	36.00
DR Pascal	36.00
DR C Basic Compiler	36.00
Electric Studio Light Pen	63.00
Electric Studio Mouse	105.00
Modula 2	40.00
Mini Office II	26.00
Sam	25.00
Rotate	23.50

### DESKTOP PUBLISHING

Fleet Street Editor Plus	49.00
Newsdesk International	38.00
Newsdesk Int. & Light Pen	55.00
The Desktop Publisher	27.00
The Desktop Publisher with Mouse	60.00

Stop Press with Mouse	70.00
Tas Sign	25.00
Master Scan	60.00
Master Paint	18.00
Master Scan & Master Paint	68.00

### LEISURE SOFTWARE

Air Combat Emulator	18.00
Academy	18.00
Annals of Rome	22.00
Bridge Player 2000	17.00
Batman	13.00
Boulder	13.50
Classic Collection	11.00
Colossus Bridge 4	15.00
Colossus 4 Chess	15.00
Cyrus 2 Chess	15.00
Distractions	17.50
Fairlight	14.00
Fairlight 2	14.00
Football Fortunes	15.00
Frank Bruno Boxing	17.00
Forth Protocol	17.00
Graham Gooch Cricket	17.00
Guild of Thieves	17.50
Head Over Heels	14.50
Hitchhikers Guide	22.00
Leaderboard	17.50
Lord of the Rings	24.00
Lurking Horror	22.00
Living Daylights	13.00
The Pawn	18.00
PSI S Trading Company	17.50
Silicon Dreams	17.00
Strike Force Harrier	17.50
Stationall	22.00
Steve Davis Snooker	17.50
Scrabble	17.00

### EDUCATION

Touch n Go	14.50
Locoscript Tutorial	8.95
Jan Key Typing Tutor	22.95
Hands On CP/M Plus	19.95
Hands On dBase II	19.95
Hands On Supercalc	19.95

### BOOKS

Program your PCW	6.95
Step by Step Guide to Locoscript	4.95
Amstrad CP/M Plus	12.95
Using the PCW 8256	9.95
CP/M Bible	16.50
Understanding dBase II	22.95
dBase II for the 1st Time user	22.95
Soul of CP/M	16.50
Using CP/M	5.95
Mastering CP/M	17.95
BASIC II Users Guide	9.95

### PCW HARDWARE

PCW 8256	325.00
PCW8512	435.00
PCW9512	540.00
Amstrad RS232C/Contronics I/F	50.50
Amstrad FD2 Second Drive	143.00
8256 Memory Upgrade	27.00
PCW Dust Covers	9.95
10 Blank 3 1/2" 5.25" Discs	23.00
PCW Joystick & Interface	25.50
Loadable Direct Memory Access	9.95

ALL PRICES INCLUDE VAT, POST & PACKING TO UK

## Comtec Systems

S8a Wellingborough Road Northampton NN1 4DN Tel: (0604) 24463/21763

- ALL PRICES INCLUDE VAT & POST & PACKING, SUBJECT TO CHANGE WITHOUT NOTICE
- We are fully authorised Amstrad Repair Centre, with 'In house' repair facilities.
- Phone now for details of our service contracts and repair costs.
- County Council, Local and Education Authorities. Orders Welcome.
- Corporate and Export Orders Welcome.
- Please phone now for fixed price contracts and bulk orders

TELEX: 265871 HONREF G QUOTING 72: MAG 31116

### OVERSEAS ORDERS

Please add the following to your order and make all payments in sterling

Software, Books, Discs, Leads	£2.00
Printers, Disc Drives	£20.00
Computers	£40.00

Please send me the following items:

Qty	Product	Price (inc VAT)
-----	---------	-----------------

M/C TYPE ☐ 1512 ☐ 8128 ☐ 8512 TOTAL

Name Mr/Mrs/Ms \_\_\_\_\_  
Address \_\_\_\_\_

Postcode \_\_\_\_\_ Tel No. \_\_\_\_\_

I enclose (please tick) ☐ cheque/p.o. or, please debit to my ☐ ☐ ☐

☐ Access ☐ Visa card

Send to: FREEPOST

**Comtec Systems**

NORTHAMPTON NN1 4BR Tel: (0604) 24463/21763

# TIP-OFFS

The pages with more tips than a cabful of Japanese tourists

Being taken for a ride by your PCW? Put yourself in the driving seat by reading the next few pages, and collect a bagful of lucrative LocoScript tips. And if you know some sneaky shortcuts or things the manual's missed in any well-known program, tell us: the best directions win £30! This month's money goes to Robert Goddard of Dorset for his graphical description of LocoScripted bar-charts.

## Called to the bar

Owners of 8000 machines and LocoScript 2 can create effective bar charts to present their data with simply and easily.

While editing a document, press [I2]=Layouts and select 'new layout', then enter the following settings:

Left margin [f1] at 05  
Right margin [f1] at 85  
Line spacing [f4] set to 1/2



▲ Defining your box in Locochar

Set a simple tab [t3] every 5 spaces. With [I7], name the layout 'Bar chart'.

Get back to the main editing screen (by [EXIT]ing twice) and create a phrase under the letter X consisting of five solid boxes – you get these by pressing [ALT]+[I7] to go into 'symbol' mode and then [SHIFT]+X five times. (To define the phrase, place the cursor just before the five boxes, then do [COPY], move the cursor to just after the boxes, press [CUT] and then X.

LocoScript 2.12 owners can use the LOCOCHAR character designer to define a solid grey box character which makes even better looking bars. To get grey, just space your character dots out a bit

rather than having every single dot position black.

To create the vertical (y-) axis, put one vertical line ([EXTRA]+<) say eight spaces in from the left-hand margin on each line. The lines don't join up on screen but will on the printout. The numbers for the y-axis look best in pitch 17 subscript and their position on the axis can be shown by an underline character ([SHIFT]+hyphen). You can use a redefined vertical line as described in the 'Professional Boxing' tip overleaf to make things neater.

The horizontal (x-) axis can be done quickest by putting the cursor at the left-hand edge of the axis and typing the codes (+UL)(+RA)(UL). This turns underlining on, goes to the right margin and turns

## Making a daisy change

There is no straightforward way of changing the daisywheel in mid-document on the 9512 to print, for example, a word in italics or a section in a different typeface – but, by using the fact that pressing the [PTR] key pauses printing at the end of a line, you can do it. Here's how to get a word in the middle of a line printed in italics or some typeface requiring a print wheel change.

The trick is to set the line spacing to zero (with the [I4] menu or the (+LS0) command) so that the printer will not advance the paper at the end of a line. Print one line with the normal text in it and stop where the italics are to go, pause the printing, and change wheels. Then print the italics, pause, change wheels again, and continue.

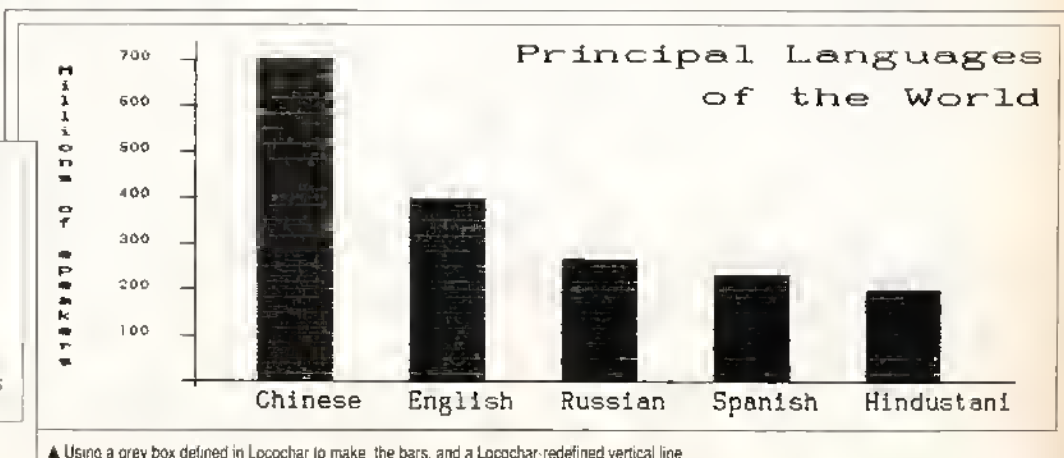
First prepare two phrases: phrase X containing the codes (CR+0), (+LS0) and (+ReV) followed by a carriage return; and phrase Z containing a carriage return followed by the three codes

underlining off, so underlining the whole line.

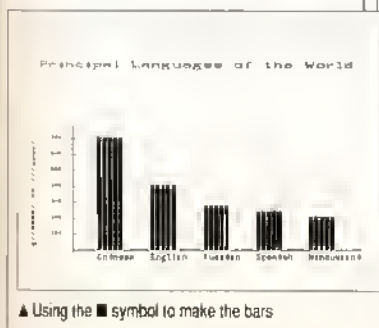
The bars themselves are created by tabbing to the required places and then pasting in the five solid boxes held in the X phrase ([PASTE]+X). Paste the phrase in as many times as you need to represent the data values in question.

The great advantage of these bar charts is that they can go into the middle of normal LocoScript text documents, and look really effective in the middle of reports. You don't need to mess around feeding pages through the printer twice printing first the text and then the graphics.

Robert J Goddard  
Sturminster Newton, Dorset



▲ Using a grey box defined in Locochar to make the bars, and a Locochar-redefined vertical line



▲ Using the ■ symbol to make the bars

# TIPOFFS

(-CR), (-LS) and (-ReV).

Immediately before the phrase you want to italicise, paste X in. The cursor moves to the beginning of the next line. Now type in tabs and spaces to the point where the italicised section is to start and enter the text to be italicised. At the end, paste Z in and, on the next line, type a combination of tabs and spaces to take you to where the normal text is to resume.

All this shows on screen as three lines, but prints out on one. You can't use proportional spacing since you are relying on the fact that a space takes up the same width as any other character to get the columns on the three overprinted lines to correspond, but any other pitch will be OK.

The (+ReV) and (-ReV) codes don't affect the printing, but serve to highlight the italicised area so that if you forget to do a [PASTE]+Z which turns ordinary line spacing back on you will have a visual warning!

When the printer is typing out your document, watch for the line with the italics in it and when it starts to type out, hit the [PTR] key. It stops at the end of the line at the

carriage return (which doesn't advance the paper because the line spacing has been set to zero). Change the printer to your 'Script' print wheel (the 9512 print wheel which passes for italics), then press [EXIT]; the printing restarts. Press [PTR] again immediately and the printer stops at the end of the next line, the one with just the italic phrase. Change the wheel back and hit [EXIT] again to continue normally.

If you want italic text on more than one line, you'll have to put a (-LS) code at the beginning of the italic line and a (+LS0) at the end, or all the lines will go on top of each other.

Jonathan Clatworthy  
Shetfield

● *TipOfts Editor adds: Proper Amstrad italic daisywheels, as opposed to the Script typeface, for the 9512 should be available shortly. In the meantime, as the 9512 printer is a modified Nakajima (a reasonably standard formal machine) there may be some other makes of italic wheels around which will fit - if you find any, let us know!*

## Photocopying photos

You can produce perfectly adequate desktop publications by photocopying, and this is usually the cheapest method of reproduction for small-scale publications. However, the disadvantage is that if you photocopy photographs, they come out very badly, all the grey tones being converted to harsh black or white.

What you're supposed to do is to 'screen' or 'half-tone' photographs intended for printing. This converts them into a pattern of dots that can be photocopied. However, photocopying shops can't do this (not on the spot, anyway) and printers charge

around £5 per photo for doing it.

An economical alternative though is to use 'Letraset HT' - this is a sheet of white dots which you place between your photo and the copier glass, so that the photocopier's scanning device effectively sees a screened photo. The copies will then look authentically grey.

Each sheet of Letraset HT (roughly A4 in size) costs £4, and is available from any art shop or good office stationer's. It isn't traditional rub-down Letraset, so you can re-use one sheet over and over again.  
Beryl Asino  
Kingstreet, Avon



▲ Before

▲ After

## The best possible paste

Very often when experimenting with some of LocoScript's fancy italics, bolds and pitch commands, you have no idea of the final appearance because none of these effects can be shown on the PCW screen.

However, you can test out your enhancements by copying the parts you want to test, including the codes of course, to phrases. Exit via 'finish edit' to the disc manager screen. Press D for

direct printing and paste the phrases just copied, each followed by a [RETURN] - you can thus check on their appearance without having to print the whole document.

Particularly if you want to check on a number of special effects this can save considerable time.

H C de Jongste  
Claygate, Surrey

## Professional boxing

One of the minor irritations of printed boxes in LocoScript is that they don't come out very neatly. Although it is possible to join up the vertical lines by using half spacing, the horizontal ones produced by underlining still do not connect properly at the corners and leave either a gap or an overlap which looks scrappy and amateurish.

A solution for owners of LocoScript 2.12 is to create a new character using the LOCOCHAR

program. The character required is a vertical line at the extreme edge of the available space between the top and bottom lines of dashes. For frequently used tables a 'mask' can be created and stored as a file. If centre-tabs are positioned half way between the vertical lines, data can be entered without disturbing the lines on the screen.

S T Payne  
Great Missenden, Bucks

### Singular

	Masc.	Fem.	Neut.
Nom.	hic	haec	hoc
Acc.	hunc	hanc	hoc
Gen.	huius	huius	huius
Dat.	huic	huic	huic
Abl.	hōc	hāc	hōc



## Tails you win

Owners of old dot matrix printers may have found that when the tails on printed letters like g and p disappear, the usual cure - a good dowsing of the print head with WD40 - only resuscitates them for a short while. The only real remedy may well be to clean the pins on the printer themselves.

With the print head still tethered to the printer by its copper braid, take a crosshead watchmakers screwdriver (if you can't borrow one, they cost around £5) and remove the four tiny bolts from the printing side of the head. Keeping the metal striker part of the print head uppermost, (black plastic and printing face downwards) carefully ease the metal striker part away from the black plastic housing holding the pins. Put the black plastic piece on the table with the printing face downwards.

Note the position of the pin tails on a circular diagram. With a pair of eyebrow tweezers, carefully

withdraw the pins and lay them on a circle. Remove the return leaf springs ring. It has a small protrusion which slots into a matching slot on the plastic case so you can't put it back in the wrong position - the Koreans have obviously met Murphy. Beneath the leaf springs ring, there's another packer ring which exactly matches the leaf springs ring. Beneath that is a fibre washer to stop dust.

Douse the plastic printing head and particularly the line slots in which the pins slide with lots of WD 40 - old printers will have an amazing amount of muck there.

Reassembly is the reverse procedure. The whole procedure takes around thirty minutes. For testing, printing in draft makes it easy to see which pin is playing up, and after cleaning, printing a few pages in NLQ without the ribbon in place will work off excess solvent.

A (Ike) Dawson  
Gainford, County Durham



**Hardsoft • international**  
**1a The Square, Sawbridgeworth, Herts**  
**0279 726488/406**

LEASE AN AMSTRAD PC1640  
 DDMD + EPSON PRINTER + WORDPROCESSOR + SPREADSHEET ... FOR  
 UNDER £7.00 PER WEEK

We offer all the Amstrad machines, various printers and software for sale,  
 lease purchase or lease-rental. Short term hire available.

PCW 8256 - £289 + VAT  
 PCW 8512 - £389 + VAT  
 PCW 9512 - £484 + VAT

ALL WITH FREE MAINTENANCE CONTRACT WORTH £75

Software also available at up to 1/2 normal prices

\* NATIONWIDE NEXT DAY DELIVERY \* CONSUMABLES \* FREE TAX &  
 FINANCIAL GUIDANCE \* CONTINUOUS STATIONERY \*  
 \* 24 hr MAINTENANCE \*

## AT LAST!

### RIBBON RESTORATION THAT REALLY WORKS!

Unique NEW process pioneered by us  
 Much more than mere re-inking...

Restored ribbon actually lubricates print-strike mechanism as it goes!

- Print quality like new
- Longer ribbon life
- Smooth running of ribbon and print head

**SAVES £££££!** **£1.95** per ribbon  
 inc. VAT  
 or **£8.50** for 5

FREEPOST us your faded  
 ribbon (please package  
 carefully!) Payment with  
 order, please. Allow 21  
 days for return.

**CASPELL COMPUTER SERVICES**  
 Dept. 8K, FREEPOST, Poole, Dorset BH15 1BR

## FOR AMSTRAD 8256 ROTATE

### Now you can print your Locoscript text and spreadsheets sideways

ROTATE enables anything you can save in an ASCII  
 format to be rotated through 90°.

So you can now print sideways spreadsheets like  
 SuperCalc and Multiplan - no more need to 'cut & paste'.  
 ROTATE also allows you to print in a variety of fonts.

**ROTATE only costs £21.70 plus p & p and VAT.**

For your copy send £25.95 to:  
 Trinity Business Systems, 52 Queens Road, Helthorpe,  
 Norwich NR9 3DB. Tel: 0603 812195.

Telephone Access Card orders accepted.  
 Or write or ring for more details.

Have a go at PCW programming with:

### FREE C

a public domain floating point small C compiler for the Amstrad PCW range for just £4.00.  
 (PC compatible and CPC versions available too).

We also have:

INTEGER C — offers many more C facilities at the expense of floating point numbers  
 FORTH-83 — full implementation  
 PASCAL — The JRT version of Pascal  
 COBOL — the popular business programming language - strong on file handling  
 XLISP — symbolic language for AI programming  
 PISTOL — an experimental language based on ideas taken from Forth  
 Z8E — superb machine code debugger — run-time monitor, assembler, disassembler  
 EXPORT 86 — Our own Export System Builder reviewed in 8000+ December 87

and many more public domain programs for PCWs, all at £4.00 each. Send an 18p stamp  
 for our catalogues. We publish catalogues for Amstrad CPCs and PCs as well as PCWs so  
 please state which machine you have.

POSTAGE — please add 50p for the first disk and 10p per disk thereafter.

**PROSPEC Shareware,**  
**PO Box 28, Beeston, Nottingham NG9 1PH**

## MIDAS SOFTWARE

53, BUSH HALL ROAD, BILLERICAY, ESSEX CM12 0PU

(0245) 461946

**FREE 20 Page Colour Catalogue includes software for IBM PC & Compatible machines**

*Orders despatched on day of receipt (subject to stock availability)*

### PCW Software

#### FINANCIAL MODELLING:

SUPERCALC 2 £37.95  
 CRACKER 2 £37.95  
 SCRATCHPAD PLUS £37.50

#### WORD PROCESSING:

NEWWORD 2 £51.75  
 POCKET WORDSTAR DELUXE £49.95  
 SPELLSTAR (PCW ONLY) £ 9.95  
 LOCOSCRIPT 2 £18.95  
 LOCOSPELL 2 £18.95  
 LOCOMAIL or LOCOSPELL £29.95

#### DESK TOP PUBLISHING:

THE DESK TOP PUBLISHER £24.95  
 THE DESK TOP PUBLISHER  
 WITH AMX MOUSE £69.95  
 MASTER PACK (SCANNER  
 WITH MASTER PAINT) £69.95

#### UTILITIES:

BRAINSTORM £40.25  
 ROTATE £19.95  
 SMARTKEY £29.95  
 FLEXILABEL £23.00

#### GRAPHICS:

DR DRAW £37.95  
 DR GRAPH £37.95

#### COMMUNICATIONS:

DIAL UP £79.95  
 CHIT CHAT E-Mail & 'Viewdata' £89.95

#### ACCOUNTS/PAYROLL:

CAMSOF (from £49.95) £119.95\*  
 CAMSOFT INTEGRATED PSIL  
 M A P (from £49.00)  
 MAP INTEGRATED ACCOUNTS £179.95\*  
 SAGE (from £69.99)  
 SAGE ACCOUNTS/PAYROLL £115.00\*

**\*PLUS FREE MINI OFFICE  
 PROFESSIONAL**

#### TRAINING:

TOUCH 'N' GO £19.95  
 IANKEY Typing Crash Course £79.95  
 IANKEY 2 Fingers Conversion £19.95

#### DATABASE MANAGEMENT SYSTEMS:

CAMBASE (Series 2) £49.95  
 CARDBOX £47.99  
 CONDOR I £79.99  
 dBASE II £79.95  
 SAGE RETRIEVE £57.50  
 DELTA I 25 £79.99

### Bargain Buys

#### MINI OFFICE PROFESSIONAL

**£23.95**

#### dBASE II

**£74.95**

#### PROTEXT

**£44.95**

#### AMSOFT 3" CF2 DISCS

**£23.00**

#### PCWB256/8512

#### FABRIC RIBBON

**£3.75**

#### PCW9512

#### MULTISTRIKE RIBBON

**£2.99**

#### DMP2000/3160 FABRIC RIBBON

**£3.45**



**ALL PRICES INCLUDE VAT & POSTAGE**



**APPOINTED AMSTRAD BUSINESS COMPUTER DEALER**

## COMPUTERS

Title of Goods		Our Price	
		R.R.P.	Price
CPC 464 Colour Monitor	Amstrad	799.95	784.95
CPC 464 Mono Monitor	Amstrad	199.45	189.95
CPC 6128 Colour Monitor	Amstrad	799.95	779.95
CPC 4128 Mono Monitor	Amstrad	299.45	284.95
PC 1512 DD Colour Monitor	Amstrad	246.25	209.07
PC 1512 DD Mono Monitor	Amstrad	57.85	54.14
PC 1512 SD Colour Monitor	Amstrad	421.25	399.28
PC 1512 SD Mono Monitor	Amstrad	458.85	431.88
PC 1640 DD Colour Display Monitor	Amstrad	1073.85	987.16
PC 1640 DD Mono Display Monitor	Amstrad	688.85	654.41
PC 1440 HD Colour Display Monitor	Amstrad	1206.75	1146.02
PC 1640 HD Enhanced Colour Display	Amstrad	1208.85	1209.91
PC 1640 HD Mono Display Monitor	Amstrad	1073.85	987.16
PC 1640 SD Colour Monitor	Amstrad	746.25	720.91
PC 1640 SD Enhanced Colour Monitor	Amstrad	918.85	872.91
PC 1850 SD Mono Monitor	Amstrad	57.85	54.14
PCW 8512	Amstrad	425.91	376.66
PCW 8512	Amstrad	458.85	425.91
PCW 9512 C/W Daisywheel Printer	Amstrad	528.85	545.16
Spectrum 128+2	Amstrad	129.45	122.95
Spectrum 128+7	Amstrad	199.45	189.95

## PRINTERS

Title of Goods	Amstarad	Our	
		R.R.P.	Price
DMP 7160 Printer	Amstarad	159.00	151.05
DMP 2160 Printer	Amstarad	228.85	217.41
DMP 4000 15" Printer	Amstarad	401.75	381.78
I Q2500 Printer	Amstarad	401.25	381.76

## PAINTER RIBBONS

Title of Goods	R.R.P.	Price
DMP 7000-2160 3000-7160 Primar Ribbons	5.99	4.74
DMP 4000 Ribbons	8.05	6.44
DMP-1 Primar Ribbon	6.50	5.20
LQ7500 Feprint Ribbon	6.50	5.20
PCW 8756-8512 Caabon Ribbon	4.99	3.94
PCW 8756-8512 Fabac Ribbon	6.50	5.20
PCW 9512 Cerbon Ribbons	4.89	2.91

## PLANTING

Title of Goods	Unit	Price
2" Blank Disc	Amstrad	200
5 1/4" Blank Discs	Amstrad	1250
10 1/2" Blank Discs	Amstrad	2486
10 2 1/2" Double Density Microdisks	Datung	2955
10 7/8" Single Density Microdisk	Datung	2295
10 5 1/4" Disk	Datung	995
10 C.I.S. Cassettes	Amstrad	495

### DISC STORAGE BOXES

Title of Goods	QTY	Unit Price	Total Price
10 Spare 2" Disc Bore			
AMS 201 holds 20 x 2" discs	1	150.00	150.00
AMS 701 holds 40 x 2 1/2" discs	1	175.00	175.00
DD 1001 holds 100 x 5 1/2" discs	1	125.00	125.00

## CONTINUOUS PAPER-LABELS

Title of Goods	Qus	Price
100 7 7/8" Floppy Disc Labels 89 x 70	300	250
100 5 1/4" Floppy Disc Labels 172 x 76	300	300
100 Address Labels 1 across	150	150
100 Cassette Labels 89 x 41 with cut outs	150	200
100 Standard Disc Labels 55 x 75	150	186
1000 Sheets 80gm Continuous Paper	1795	1795
1000 Sheets A4 25gm Continuous Paper	1245	1245
2000 Sheets A4 80gm Continuous Paper	1435	1435
2000 Sheets 60gm Continuous Paper	1245	1245
2000 Sheets 80gm Continuous Paper	1795	1795
2000 Sheets A4 20gm Continuous Paper	2145	2145
500 Address Labels 1 across	495	495
Bunkiro per 1000	M A P	2200
Bait giro per 750	M A P	1200
Paylips per 1000	Sagesola	4000
Paylips per 1000	M A P	1700
Paylips per 250	M A P	3700
Remittance Adfric per 1000	M A P	2675
Remittance Adfric per 250	M A P	4700
Statements per 100	SAGESOFT	1200

## DUST COVES

Title of Goods	Unit	Quantity	Unit Price	Total Price
2000/2160 3000/7160 Printer Dust Cover		1	4.50	4.50
4000 Printer Dust Cover		1	5.50	5.50
CPC Dusa Covers Colour Monitor		1	8.50	8.50
CPC Dusa Cover Mono Monitor		1	7.50	7.50
PC1512 Dusa Cover Colour Monitor		1	12.45	12.45
PC1512 Dusa Cover Mono Monitor		1	11.95	11.95
PCW Dusa Cover		1	11.95	11.95

## INDEX

Title of Goods	Price
125 MusJoyanck Cheetah	8.95
BAC Competition Pro Joystick	16.95
C16 Joystick Microswitch	14.95
Competition Pro 5000 Clet Joystick	15.95
Competition Pro 5000 Joystick	14.95
Creeker Microswitch 1 Multidirection	9.99
Economy Joystick	5.99
Fantastick Joystick	6.99
Formula 2 Joystick	12.95
konastick Joystick	15.99
1/2 Joystick w/2nd Port	Amrad
Match 1 Plus Joystick	Cheetah
Magnum Joystick Microswitch	Maserrone
Praser One Joystick	Bartum
Quickshot 2 Joystick	Spearrad
Quickshot 2 Plus Joystick	Pafan Electrom
Quickshot 2 Turbo Microswitch	Spearrad

50% Stock Joystick	Suncom	6.49
Speeding Joystick	Konix	12.99
Supercharge IBM & Comandrolle Card	Suncom	47.49
Starfighter IBM Joystick	Suncom	24.99
Starfighter Joystick	Suncom	9.99
Tac 1 IBM & Apple Joystick	Suncom	29.99
Tac 1 IBM/Apple Joystick & Controller Card	Suncom	49.99

## GENERAL UTIUTIES

Title of Goods	Unit Price	Quantity	Total Price
7 Head Cleaning Kit Disc	\$ 85		945
2 1/2" Head Cleaning Kit Disc	Sumcom		695
5 1/4" Head Cleaning Kit Disc	Sumcom		595
Monitor Station Stand	Sumcom		1595
Mouse Mat	Advance Memory		445

### Methodology

Title of Goods	R.R.P.	Price
Academy	C.R.I.	19.95 12.99
Annals of Rome	P.S.	19.95 12.99
Bullyhoo	Infocom	24.95 22.49
Batman	Ocean	14.95 12.49
Bounda	Gremlin	14.45 12.49
Brian Clough Football	C.D.S.	17.95 16.18
Colossus Bridg	C.D.S.	15.45 14.49
Colossus Chess4	C.D.S.	15.95 14.29
Cualtroza	Infocom	24.49 22.49
Deadline	Infocom	24.95 22.49
Dialectronics	Crystal/Design	19.95 17.49
Enchanter	Infocom	24.95 22.49
Fantasy Protocol	Apocalypse	15.95 14.38
Faziz Buenos Aires	Elite Systems	19.45 17.99
G Gooch Test Cricket	AudioGraphic	14.95 12.99
Guardian Blagger	Atlantis	14.44 12.49
Guild of Thieves	Rainbird	24.95 22.49
Head over Heels	Ocean	14.45 12.49
Hitt hikers Guide	Infocom	24.95 22.49
Hollywood Hi	Infocom	24.95 22.49
Infidel	Infocom	24.95 22.49
Jewels of Darkness	Remind	19.95 17.99
Leaderboard	U.S. Gold	19.95 17.99
Leather Goddess	Infocom	24.95 22.49
Living Daylights	Dontale	14.45 12.49
Lucky Horror	Infocom	24.95 22.49
Moonmen	Infocom	24.44 22.49
Planet	Rainbird	24.95 22.49
Planetfall	Infocom	24.49 22.49
P.S.'s Trading	U.S. Gold	19.98 12.99
Scrabble	Lumart Gattus	19.95 17.99
Sensibilities	Infocom	24.95 22.49
Silicon Dreams	Rainbird	14.95 12.49
Sorcerer	Infocom	24.99 22.49
Spellbreast	Infocom	24.99 22.49
Starcross	Infocom	24.99 22.49
Steriloid	Rainbird	24.95 22.49
Seasonhill	Infocom	24.99 22.49
Steer a Darin Snooker Disc	C.D.S.	14.95 12.49
Strike a Deed Herries	Infocom	19.95 17.99
Suspect	Infocom	24.95 22.49
Suspended	Infocom	24.98 22.49
Taxiway	Quartz Int.	14.95 12.49
Taxiway Genia Fdus	Donsark	19.95 12.49
Washbringer	Infocom	24.99 22.49
Zort	Infocom	24.99 22.49
Zork2	Infocom	24.99 22.49

## AMSTERDAM: CWV-UTRECHT

Title of Goods	R.M.P.	Palae
Accounts	199.95	179.95
Accounts + Payroll	199.95	129.95
Accounts with Stock	199.95	179.95
AMX Mouse/Desktop/DFS	29.95	71.95
Armor C	49.95	44.95
BCPL	29.95	25.95
Brainstorm	49.95	44.95
Business Control	99.95	89.95
C Basic Compiler	49.95	44.95
Cambase	49.95	44.95
Cashbar	59.95	52.95
Cash Trader + Analyser	149.95	134.95
Chit Chit + Modern	258.25	223.88
Chit Chit Combo	99.99	89.99
Chit Chit Mail	64.99	43.99
Chit Chit Modern E-Mail	199.99	179.99
Chit Chit Modern View Drop	199.99	179.99
Chit Chit View Date	69.99	67.99
Combo Pack	149.95	134.95
Communications Combo + Modern	258.25	223.88
Compact Accounts	199.99	179.99
Compact Accounts Plan	249.99	224.99
Companion	19.95	17.95
Condo	99.99	89.99
CP8256 Pariser Interface	62.85	61.07
Craft 2	49.95	49.95
Crash Course Tutor	24.95	27.45
Database Manager	29.95	26.95
Desktop Mailflow	49.95	44.95
Desktop	29.95	25.95
Desktop	29.95	25.95
Desktop	69.99	67.99
dBase II	119.00	102.10
Delta	99.00	89.00
Delta	99.99	89.99
Desk Top + Mouse	79.95	21.95
Desk Top Publishing	29.95	26.95
Desktop 80	29.95	25.95
Draw	49.95	44.95
Easy Labeler	79.95	76.95
File Manager	99.95	89.95
Financial Report	49.99	44.99
Filea Street Editor Plus	69.95	67.95
Forth	199.95	179.95
Gong Loce VHS Videos	74.95	72.45
Graph	49.95	44.95
Graphics Operating System	69.95	62.95
Graphics like Universe & Everything	14.95	12.95
HighFlow P.R.M.	24.95	23.45

Hands onBase II	Maraget	29.95	26.95
Hands on Superpack	Microgel	74.45	71.45
Integrated Accounts	M.A.P. Computer	147.00	134.10
Integrated Accounts	Camsoft	149.95	124.95
Integrated Accounts	Sandpaper Software	149.45	124.95
Integrated Series	Camsoft	99.95	89.95
Interlaser	Compact	49.99	62.99
Invoicing	Camsoft	49.95	44.95
Investing/Sales Ledger	M.A.P. Computers	49.00	44.10
Joyceart Int. Interface	Cascade	1.495	1.295
Labelwriter	Wright Scientific	22.00	20.70
Light Pen & Graphics	Electric Studio	79.95	71.94
Letter Modern	Pace Micro Tech	147.00	123.80
Localnet	Amsoft	24.95	25.95
Localnet 2	Amsoft	29.95	25.95
Locoscript 2	Locomotive Sys	14.95	17.95
Locoscript Professional	Headline	78.69	75.87
Locospell	Amsoft	24.95	25.94
Locospell 2	Amsoft	29.95	35.94
Macro Fillas	Saga	64.99	62.94
Masterfile 8000	Campbell Sys	49.95	44.95
Masterpack	Database	79.95	71.95
Masterpaint	Database	19.95	12.95
Masterplan	Database	64.95	62.95
Masterhor	Quest	24.95	26.95
Maxam II	Amsoft	79.95	71.95
Micro Simplex (MS12)	Micro Simplex	114.85	102.29
Mini Office Professional	Database	79.99	76.99
Modula 2	Hasoft	44.95	44.95
Money Manager Plus	Connect Systems	29.95	76.94
Mouse and Graphics	Electric Studio	129.95	116.46
Mouse Interface	Electric Studio	129.95	114.94
Newsdesk International	Electric Studio	44.95	44.95
Newsdesk International	E.S.P.	49.95	44.95
Navalita	M.A.P. Computer	146.00	134.10
Nominal Ledger	M.A.P. Computer	49.00	44.10
Nominal Ledger	Camsoft	49.95	44.95
Nominal Ledger	Compact	64.99	62.99
Nominal Ledger	Amsoft	32.00	79.70
Nuclia	Compact	99.99	89.99
Nucleus Interface	Compaca	99.99	89.99
Page boy	Thurston Brown	2.45	2.21
Postal MT+	Digital Res	49.95	44.95
Payroll	Compacta	99.99	89.99
Payroll	MAP	99.00	44.10
Payroll	Sandpaper Software	79.95	71.95
Payroll Inc Mesapac	M.A.P. Computer	49.95	42.94
Payroll System	Camsoft	49.95	44.95
PCW Communicator RS222	RAM Electronics	99.95	94.25
PCW Heed Clennig Kit	S.B.S.	9.95	9.95
PCW Joystick 1 + 1 Face	Kempton Data L	24.95	22.46
PCW Joystick Interface	Kempton Data L	14.95	12.46
PCW Joystick Interface	RAM Electronics	14.95	12.46
PCW Joystick Pack	Spectravideo	29.95	26.95
PCW Mouse System	Kempton Data L	69.95	62.46
PCW Mouse with Waste Hand Mem	Kempton Data L	89.95	80.95
Personal Tr. Planner	Digital	24.95	22.46
Pick It	Database	24.95	22.46
Packets Calcstar	Micropro	24.95	75.95
Packets Protekt	Amsoft	29.95	25.44
Packets Repostar	Micropro	49.95	44.95
Packets Superpost	Micropro	44.95	44.95
Packets Wordstar	Micropro	49.95	44.95
Pop Accounts	Sagesoft	99.99	89.99
Pop Accounts Plus	Sagesoft	149.99	134.99
Pop Chit Chat Combo	Sagesoft	94.99	89.99
Pop Combo	Sagesoft	149.99	134.99
Pop F Mail	Sagesoft	69.99	62.99
Pop Interlocking	Sagesoft	49.99	67.99
Pop Payroll	Sagesoft	69.99	62.99
Pop Retiree	Sagesoft	67.99	67.99
Pop Sup Combo	Sagesoft	199.99	179.99
Pop V Data	Sagesoft	49.99	42.99
Pop Super Combo Disc	Sagesoft	199.99	179.99
Prod Joystick Interface	RAM Electronics	24.95	22.46
Prod Joystick Sound Effect	RAM Electronics	29.95	25.95
Prospell	Amsoft	29.45	28.95
Protera	Amsoft	79.95	71.95
Protect Epsilon	Amsoft	28.95	25.95
Purchase Ledger	M.A.P. Computers	49.00	44.10
Purchase Ledger	Camsoft	49.45	44.95
Purchase Ledger	Compact	69.99	62.99
Purchase Ledger	Amsoft	22.00	79.70
Real Time Clock Module	RAM Electronics	24.95	21.46
Reamview	Sage	69.99	62.99
Rotate	Protostar	24.95	22.46
Saga Database (Reactive)	Sagesoft	69.99	67.99
Sales Ledger	M.A.P. Computer	49.00	44.10
Sales Ledger	Camsoft	49.95	44.95
Sales Ledger	Compact	69.99	62.99
Sales Word Processing/Invoicing	Compaza	69.99	67.99
Sam	Prim	29.95	24.95
Sandpaper Accounts (Dual)	Sandpaper	149.95	124.95
Sandpaper Accounts (Single)	Sandpaper	179.95	154.95
Sandpaper Payroll (Single)	Sandpaper	69.95	62.95
Scratch Pad	Canaan	69.99	62.99
Scratch Pad Plus	Carton	55.94	50.79
Signmaster	Wright Scientific	99.95	44.95
Stock & Invoicing Disc	Sagesoft	69.99	62.99
Stock Control	M.A.P. Computers	49.00	44.10</

SEND FOR OUR CATALOGUE OF OVER THREE THOUSAND TITLES FOR AMSTRAD CPC - PCW - PC, COMMODORE, SPECTRUM, ATARI/ATARI ST, BBC MSX ELECTRON, APPLE SERIES 2 - APPLE MACINTOSH COMPUTERS ALL AT DISCOUNT PRICES.

ALL PRICES INCLUDE V.A.T. POST & PACKING UK ONLY, EXPORT ORDERS WELCOME  
**Coldstream Computer Centre, 48 Duke Street, Coldstream, Berwickshire TD12 4LF**  
 Shop open Mon/Sat 9.30-12.00 1.00-5.30 Tel: 0890 2979 24 hour order service on 0890 2854





# THE GOOD SOFTWARE FILE

These pages provide a comprehensive guide to the Amstrad PCW software. Published in three monthly parts, this time it's the turn of Word Processors (including Desk Top Publishers), Accounts/ Payroll packages and Utilities. We've set out to cover every important piece of software we could lay our hands on, and to give you enough information to decide whether they are suitable for you.

All software will run on both the 9512 and the 8000 series machines, though the former's daisywheel printer

cannot print graphical output.

The selection isn't comprehensive, but the software listed here represents what we think is the best of that currently available.

As well as a brief summary of what they do, the main Plus and Minus points for each program are listed – Pluses have a by them, Minuses a . Those we think are particularly noteworthy have a corner flash. Have fun window shopping!

## WORD PROCESSORS

LocoScript already comes bundled with its own word processor, so you might not think of buying another one as a priority. In fact, whatever you may have read in some magazines, LocoScript is a pretty good wordprocessor and you won't find many editing and layout functions it doesn't have. Its principal disadvantage was its slowness, but the release of LocoScript 2 has lessened that.

There are advantages to be had in changing. LocoScript cannot run from CP/M, and this may cause you trouble.

Many other word processors have a built-in 'mailmerger' program. This is a way of doing bulk mailshots; you store your address list in a data file, and write a letter with labelled gaps where you want the names and addresses to go. Then, when you print, the letter comes out once for each address, with the information in its correct place. Also, you often get a spelling checker thrown in free – look for one which allows its dictionary to be modified so you can include non-American spellings.

One thing's for sure, whatever word processor you buy it will be totally different to operate from LocoScript. The PCW keyboard is custom built to run it, and if you change you will have to get used to some arcane choices of keys to do even simple operations. Also, you won't be able (very easily) to use all the printer styles that you can in LocoScript, though there will be enough to get by with.

### LocoScript 2 **Essential purchase** £19.95 • Locomotive Software • 0306 887902

As bundled with new 9512, the new version of everyone's first word processor. If you know how LocoScript 1 works, you'll have minimal relearning to do, and it puts right (almost) all the defects of the old version at a rock bottom price. Greek and Cyrillic alphabets, and Version 2.12 even lets you define up to sixteen characters of your own design.

#### PLUSES • MINUSES

- 'Find page' command makes moving around faster
- Superb range of foreign accents and symbols available
- Can now drive daisywheel and other printers
- Has DISCKIT's formatting and copying built into it
- New 300 page manual
- Mailmerger and spelling checker not included
- Inconvenient for regular CP/M users
- Still no word counter!
- Still slow at Find, Exchange and scrolling

### LocoSpell **A must for LocoScripters!** £39.95 • Locomotive/Amsoft • 0306 887902

The ultimate spelling checker for LocoScript users. It is run as a simple menu choice while you are editing a document normally, and you can check either an entire document or only a paragraph. When it finds an error, it suggests a correction. Reasonably fast, given LocoScript's inherent slowness.

#### PLUSES • MINUSES

- Runs totally from within LocoScript
- Can do small sections of a file
- Suggests alternatives for misspelled words
- Reformats the text as it makes corrections
- Provides the much-missed LocoScript word counter
- Can't remove spellings you don't like (eg -ize) from dictionary
- The manual gets bogged down sometimes
- Slow at scrolling the dictionary window

### Pocket Protext/Protext **Best CP/M wp** £39.95/£59.95 • Amor • 0733 239011

The best CP/M wordprocessor. Very fast at moving around large files, and packed with features. Works with key combinations rather than menus, but uses LocoScript keys too. Comes complete with a good spelling checker, a lightning fast word counter and a very powerful mailmerger. 'Pocket Protext' is a stripped down version – essentially the same word processing features, but no spell checker or mail merger, and lacking one or two incidental facilities like two column printing. Specify which machine you have when buying.

#### PLUSES • MINUSES

- Complete with spelling checker/word counter
- Packed with features, eg, calculate facility, text editor for writing programs, 'print to screen' option etc.
- Lets you work with two documents at once
- You can do all of CP/M's functions without ever leaving the word processor
- Very fast at moving around, doing exchanges and so on
- Extremely powerful and flexible mailmerger is almost a word processing programming language in its own right
- Forces you to learn another new set of control keys to use it
- Not as slick as LocoScript in its printer controls

### LocoMail **Best buy!** £39.95 • Locomotive/Amsoft • 0306 887902

As a mailmerger for LocoScript, it's difficult to see how anything could be better than this. It runs directly from LocoScript, and can process any LocoScript commands. Has many advanced features and is highly recommended for all LocoScript users.

#### PLUSES • MINUSES

- You don't have to run it from CP/M
- Can print any LocoScript text formatting commands
- Can automatically rejustify paragraphs after insertion
- Can insert numeric calculations into letters
- Can read data from non-LocoScript (ie, ASCII) files
- Large manual, with example files on disc
- No way to sort and filter addresses before a print run



## WORD-PROCESSORS

### Small Great value!

**£29.95 • Proteus Computing • 01-748 2302**

A mail merge specifically designed to work with LocoScript files. It scores over LocoMail in that it has a simple but effective database system to allow you to choose your target for a mailshot by marking them with 'attributes' and selecting - eg only those customers who bought your product X.

#### PLUSES • MINUSES

- Reads LocoScript files and prints all LocoScript commands
- Well-designed database is ideal for mailmerging
- Database 'attributes' provide advanced selection capability
- Manual is lacking in examples
- No numeric calculation capability
- Doesn't read non-LocoScript files

### Prospell

**£29.95 • Amor • 0733 239011**

A stand-alone spell checker for use with almost any wordprocessor that runs on the PCWs. Reads LocoScript, WordStar and ASCII files, and allows you to make corrections directly, view the context, change the dictionary etc.

#### PLUSES • MINUSES

- Checks LocoScript and WordStar documents directly
- Displays the context of a suspected word
- Can edit misspellings directly from Prospell
- Anagram and crossword solvers too
- Doesn't work with LocoScript 2 files
- Processes files of 15k or more in sections

### Teach Yourself LocoScript

**£14.95 • LINC • 0273 776576**

Disc of teach-yourself lessons for LocoScript. Better written and organised than most tutorial programs. The advantage over a book is that you can try things out as soon as you read about them, and see the effect on the text you are reading.

#### PLUSES • MINUSES

- Well organised lessons for you to browse through as you like
- Well-pitched style of writing does not talk down to you

### TempDisc

**£11.95 • Thurston Brown • 0395 68385**

A set of ready-made TEMPLATE.SYS made up of fancy patterns of exotic characters for you to embellish and use with LocoScript. Essentially for social/personal business use. You could win £10 from the suppliers by designing your own!

#### PLUSES • MINUSES

- Using it tells you a lot about the intricacies of LocoScript
- You can achieve professional results without reading too much of the LocoScript manual
- You could write your own templates for free by reading the LocoScript manual

### Easy Labeller

**£34.44 • M.A.S.S. • 0603 630768**

Labeling program which stores your names and address list and will print out in label format selected items from it.

#### PLUSES • MINUSES

- Useful options like printing out current date
- Good search facilities
- Range of printing options will fit most stationery
- Data needs an entire disc to itself
- Data entry is slowed by returning to main menu between labels

### Label Printer

**£25.00 • Microdraw • 0622 685481**

Very similar program to Easy Labeller it not quite as powerful. Usual features of a labeller and you can store comments with each label's data.

#### PLUSES • MINUSES

- Menus simple - easy to get the program going
- Fast data entry
- Can store comments with each entry
- No import or export of data
- Data needs an entire disc to itself

### Pocket WordStar It's Wordstar!

**£49.95 • MicroPro/Davis Rubin • 0386 853610**

For many business users, word processing means WordStar. Almost everything you could need in a text processor is here and despite the title this 'Pocket' version has all the features of the original. Efficient and proven, but now showing its age and there are alternatives unless you are committed to WordStar already. £20 extra buys the De Luxe version with spell checker.

#### PLUSES • MINUSES

- Probably the world's most widely used word-processor
- Documentation is complex but well structured
- Includes a mail merge utility
- Keystroke commands fully described on on-screen menus
- You can save your own favourite customised version
- Doesn't make full use of the PCW keyboard and printer
- Page and margin formatting commands are awkward to use

### AnsibleIndexX Author's best buy!

**£49.50 • Ansible Information • 0672 62576**

Takes a LocoScript file and compiles an alphabetical index with page numbers from all the words marked. You mark the words to be indexed by using LocoScript's (+RV) code. The price includes the AnsibleCheck word counter/proof reader program too, which is also available separately at £19.50.

#### PLUSES • MINUSES

- LocoScript documents don't have to be converted to ASCII
- Can 'invert' phrases, eg 'Smith, Fred' rather than 'Fred Smith'
- Can produce a single index over several different files
- The output index is not a LocoScript document until you convert it
- Can only index words appearing literally, not general topics

### NewWord Powerful and proven!

**£69.00 • NewStar Software • 0277 220573**

NewWord sets out to exploit the WordStar market by doing the same job better. It uses much the same key commands as WordStar and will even edit documents prepared under WordStar. Comes with a spelling checker, and the on-screen help is better than WordStar's, though the keystrokes are still as obscure.

#### PLUSES • MINUSES

- Does everything WordStar does, even reads files from WordStar
- Spelling checker included
- Can un-erase words and lines
- Onscreen help better than WordStar's
- Full reformatting of text within mailmerge
- Weak on use of keypad and printer support
- Many of WordStar's disadvantages such as formatting troubles and obscure commands

### Credit Controller

**£24.95 • HPA Systems • 08697 508**

A disc of ready-made templates for use with LocoMail, turning it into a credit control system. Produces a list of debtors to chase and writes suitable letters depending on the status of the customer.

#### PLUSES • MINUSES

- Makes clever use of LocoMail
- Saves you having to plough the LocoMail manual
- If you don't already have LocoMail it is expensive
- You could write your own templates for free by reading the manual

# ACCOUNTS • PAYROLL

### Sage Accounts Best general system

**£100.05 • Sagesoft • 091-284 7077**

An integrated accounts package consisting of purchase, sales and nominal ledgers. For another £50 you can buy Accounts Plus which also has invoicing and stock control. The package is aimed at small companies with the emphasis on ease of setting up. But there are a number of limitations - in particular the package cannot cope too easily with rapidly increasing numbers of customers and suppliers.

#### PLUSES • MINUSES

- Clean, tidy and logical screen layouts and menus
- Easy to set up and use with excellent documentation
- Good audit trails and VAT reports
- Can produce formatted trial balances
- Restrictive account numbering system
- Only single Nominal ledger and VAT analysis per item
- Does not cater for settlement discounts
- Won't print remittance advice slips
- Prints out in 17 pitch, which is cramped on 9512 printer - need 17 pitch daisywheel

### Digital Business Controller

**£99.95 • Digital International • 0395 45059**

Not a full accounting system, but a very easy-to-use package with an excellent manual. Nominal ledger already set up and you can be up and running in minutes. No aged creditor/debtor lists can be produced, and problems with VAT handling mean it's not really for VAT registered businesses. For other small business though it's very good value.

#### PLUSES • MINUSES

- Delight to use with a very good manual
- You can get the system working in minutes
- Financial ratios can be included in reports
- VAT handling very cumbersome, suit non-VAT registered business
- No facility for producing aged debtors/creditors list

### Compact Accounts Versatile

**£199.99 • Compact Software Ltd • 0703 611214**

Another very large integrated package supplied on several discs and consisting of sales, purchase and nominal ledgers together with invoicing. The package is available on much larger micros, and since the format in which data is produced is the same as on PCWs, the system is particularly suitable for users planning to upgrade their hardware at a later date.

#### PLUSES • MINUSES

- Audit trails are an auditor's dream.
- Includes a facility to allow data to be used in WordStar, Multiplan or SuperCalc 2.
- Superb prepayment facility
- Can run a number of companies separately
- Easily transported to bigger computers.
- Lots of disc swapping necessary.
- Can be slow to use - it runs in Mailaid Basic.
- A couple of mildly annoying quirks in cash allocation routine and account code system.

### M.A.P. Accounts Powerful!

**£149.95 • MAP Systems • 061-624 5662/3**

This is a very powerful package moved onto the PCW at a fraction of its cost on larger micros. The size makes it a little cumbersome to use, but apart from that there are very few significant problems. The integrated suite includes the same two modules as Camsoft, but they are supplied on four sides of disc, making it effectively impossible for the software to be run as an integrated system on an unexpanded 8255.

#### PLUSES • MINUSES

- A very comprehensive and professional package
- Very good audit trails
- It's possible to run the sales and purchase ledgers over a different time period from the nominal
- Facility for handling prepayments and accruals
- Able to print full management accounts.
- The size of the programs means lots of disc swapping.
- All normal responses need to be in upper case

### Cornix Simple Accounts Easy to use

**£49.95 • Cornix • 0462 682989**

Simple cash-book style package which allows you to keep track of debtors and creditors (though not aged ones). Simple to use and you can make changes if you make a mistake. Slow to use for complex operations and number of entries in given period is limited, but very good simple program for small businesses.

#### PLUSES • MINUSES

- Simple, easy-to-use program
- Can correct errors
- Keeps track of debtors and creditors
- Slow for complex operations
- Ability to alter figures won't please accounting purists

# POOLSWINNER II

THE ULTIMATE POOLS PREDICTION PROGRAM

- **MASSIVE DATABASE** Poolswinner is a sophisticated Pools prediction aid. It comes complete with the largest database available - 22000 matches over 10 years.
- **PREDICTS** Not just SCOREDRAWS, but ALWAYS, HOMES and NO SCORES.
- **SUCCESSFUL** SELEC guarantee that Poolswinner performs significantly better than chance.
- **ADAPTABLE** Probabilities are given on every fixture - choose as many selections as you need for your bet. The precise prediction formula can be set by the user - you can develop and test your own unique method.
- **SIMPLE DATA ENTRY** All team names are in the program. Simply type in the reference numbers from the screen. Or use FIXGEN to produce fixture list automatically (see below).
- **LEAGUE AND NON-LEAGUE** All English and Scottish League teams are supported, and also the non-league sides often used on pools coupons.
- **PRINTER SUPPORT** Full hard copy printout of data if you have a printer.



**PRICE £15.00 (all inclusive)**

**FIXGEN 87/8**

AT LAST! No more struggling for hours to get the fixture list into the computer. FIXGEN has been programmed with all English and Scottish League fixtures for 1987/8. Simply type in the date, and the full fixture list is generated in seconds. Fully compatible with Poolswinner. Yearly updates available. **POOLSWINNER with FIXGEN £16.50 (for both)**



## COURSEWINNER V3

THE PUNTERS COMPUTER PROGRAM

You can develop and test your own unique winning system by adjusting the analysis formula, or use the program in simple mode. Coursewinner V3 uses statistical analysis of major factors including past form, speed ratings, course statistics, prize money, weight, going, trainer and jockey form etc. It outputs most likely winners, good long odds bets, forecasts, incasts etc. The database includes vital course statistics for all British courses. You can update the database - never goes out of date. **FULL PRINTER SUPPORT.**

**PRICE £15.00 (all inclusive)** includes Flat AND National Hunt versions.

ALL PROGRAMS AVAILABLE FOR AMSTRAD CPCs, AMSTRAD PCW, PC1512 & all IBM compatibles. All BBCs, All SPECTRUMS, COMMODORE 64/128. Supplied on tape (automatic conversion to disc) - except PCW and PC1512 (on disc) - add £3.00.

Send Cheques/POs for return of post service to...



phone 24 hrs

**selec**  
SOFTWARE



phone 24 hrs

37 COUNCILLOR LANE, CHEADLE, CHESHIRE SK8 2HX. ☎ 061-428 7425

(Send for full list of our software)

## WORLDWIDE SOFTWARE

PCW Leisure		PCW Business	
Lurking Horror	19.95	DATABASE/DESKTOP	
Colossus Chess 4	11.95	Mini Office Professional	22.95
Colossus Bridge	11.95	Linnet Modem	139.95
Living Daylights (007)	11.20	AMX Mouse/Desktop	65.95
Hitchhikers Guide to Galaxy	19.95	Masterfile 8000	37.95
Hollywood Hi-Jinx	19.95	dBase II	79.95
Leather Goddess (Adults only)	19.95	<b>SPREADSHEETS</b>	
Ali Combat Emulator (ACE)	14.95	SuperCalc II	37.95
Scrabble Deluxe	14.95	Money Manager +	29.95
Fairlight II	11.20	<b>GRAPHICS/PUBLISHING</b>	
Guild of Thieves	19.95	Newsdesk International	37.95
Gnome Ranger	11.20	MasterScan + MasterPaint	68.95
Steve Davis Snooker	11.20	<b>ACCOUNTS/INVOICE</b>	
10 CF2 Blank Disk	24.95	Sage Pop Accounts	74.95
		Pop Accounts Plus (acc+inv)	110.95

Full range of M.A.P. and Sage software available with large discounts

All prices include VAT, postage and packing in U.K.

The above represents only a small proportion of the software available at large discounts.

Please write or phone for prices of software not advertised

Cheques or postal orders made payable to **WORLDWIDE SOFTWARE.**

**WORLDWIDE SOFTWARE, 1 Bridge Street, Galashiels, TD1 1SW**  
TEL: 0896 57004

## COMPUTER TRAINING IN SOUTH LONDON

WEEKLY, IN THE SMART NEW BRIXTON ENTERPRISE CENTRE OFFICES

- Intensive one-day courses
- Absolute beginners to advanced
- LocoScript, Supercalc & CAD courses
- Experienced instructors
- After-course help-line
- Short evening intro also available

Put your new PCW to work fast

Call us on 01-274 4000 x 201

**APPLIED RESEARCH CONSULTANCY ROOM 104,**  
444 BRIXTON ROAD, LONDON SW9 8EJ

PROFESSIONAL COMPUTER TRAINING CENTRES NATIONWIDE

# Invest Now

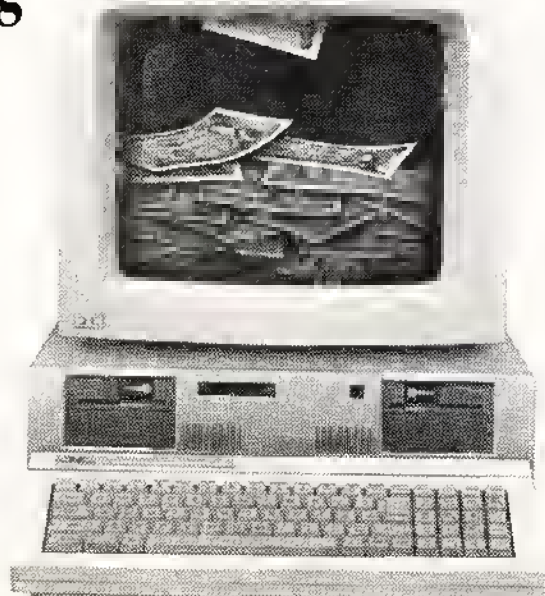
## Professional Computer Training for you and your staff.

We offer a wide range of IBM compatible courses at our training centres around the country.

In addition at our offices in Birmingham, Glasgow, Leeds and Warrington, for Amstrad users, we offer LocoScript Basic & Advanced and PC1512 Introduction.

**Make sure you're properly trained**

For full details call us on  
**(0532) 451000**



PROFESSIONAL COMPUTER TRAINING CENTRES NATIONWIDE

# THE GOOD SOFTWARE FILE

## ACCOUNTS • PAYROLL • UTILITIES

### Camsoft PSIL **Good for small company** £149.95 • Cambrian Software • 0766 831878

Consists of five integrated packages: Sales, purchase and nominal ledgers, invoicing and stock control. In terms of sophistication it falls somewhere between the SageSoft package and the larger systems from MAP and Compact. But it's easier to run than the larger packages since all the software can be squeezed into the M drive. Good package for a small company.

#### PLUSES • MINUSES

- Comes installed for PCWs and can be run efficiently by 8256 or 8512.
- No need for pre-printed stationery
- Excellent sort and search facilities.
- Invoices shown on screen as you create them
- Constant need to input full live-digit account codes.
- No final accounts reports available on nominal ledger
- No facility to run the ledgers in different accounting periods.

### Cavalier Install £99.95 • Load & Run • 0322 72116/73128

A comprehensive integrated package. Comprises 'intrad' accounts and 'instock' stock control, available separately for £59.95 each. Well designed, easy to run and powerful enough for most businesses.

#### PLUSES • MINUSES

- Other packages (eg. 'Teleadd' address book) can be added too
- Comprehensive range of features when used as a package.
- Sophisticated features in 'instock' section covering pricing and order suggestion.
- Flexible accounts. Traps most mistakes and gives useful report summaries
- Interesting forward planning facility in stock control
- Manual gives you a confusing number of options

### Anagram Accounts £86.25 • Anagram Systems • 0403 59551

Sophisticated package for users familiar with accounts. Small details like discounts and VAT are handled well but no permanent records are kept on disc and you have to use the extensive report printing options.

#### PLUSES • MINUSES

- Invoice printing is easy
- Handles customer details efficiently
- Key presses are rather obscure
- Best to have some idea of accounts before using it

### Sandpiper Accounts £149.95 • Sandpiper Software • 0978 358832

This package is described as a 'simplified' integrated system and is aimed at inexperienced users. But although it offers a large number of features at a competitive price, it suffers from some serious drawbacks. In particular the limited audit and enquiry facilities may well make it unsuitable for many businesses.

#### PLUSES • MINUSES

- Comes ready installed to run from the M drive.
- Price includes three months' telephone support.
- Very poor audit trails
- Lack of detail on nominal ledger.
- Analysis of sales and purchases very slow
- It would be easy to wipe off transactions by accident mid month.
- The documentation is confusing.
- You have to telephone to find out your pass number before you can use the package

### MAP Payroll **Good value!** £49.00 • MAP Systems • 061-624 5662

#### PLUSES • MINUSES

- Can amend and re-run at any stage (even after printing payslips)
- Cash analysis is broken down into departments
- System prevents re-use or amendment of leavers
- Facility to hold up to 40 standard hourly and weekly wage rates
- No SSP calculation facility (although there is provision to record amounts paid)
- Programs necessitate a lot of disc swapping
- Automatic amendment of tax code changes does not print a record of alterations made

### Camsoft Payroll **Simple and flexible** £49.95 • Cambrian Software • 0766 831878

#### PLUSES • MINUSES

- Full payslip displayed on screen and any item can be amended immediately — when accepted the payslip is printed at once with an optional live copy
- Facility for freehand narrative on any payslip
- Uses M drive for programs to speed operation
- Built in on-screen help facility
- Search/sort routine for output to screen, printer or disc
- Uses alphanumeric employee codes
- Screen menus a bit untidy and sometimes difficult to follow
- No listing of cheques

### SageSoft Popular Payroll £69.95 • SageSoft • 091-284 7077

#### PLUSES • MINUSES

- Any or all employees payroll can be rerun at any stage up to final update
- Full pay history available for all employees and leavers
- Calculates average pay/leaver holidays etc
- Very easy to install
- Limited number of additions/deductions
- Doesn't print a list of cheques
- No analysis of additions/deductions

### Compact Payroll £99.95 • Compact Software Ltd • 0306 887373

#### PLUSES • MINUSES

- Supplied with test data
- Facility to change employees tax codes following budget
- Can run payroll for several companies
- Program available for PC compatibles — data is transportable
- Must be run from the master discs
- Needs use of data input form and calculation of a check digit for each employee processed
- Once payslips are printed nothing can be changed
- Most expensive payroll program

### Sandpiper Payroll £79.95 • Sandpiper Software • 0978 355333

#### PLUSES • MINUSES

- Uses M drive to speed operation.
- Comprehensive SSP records.
- Cash analysis broken down into departments.
- Gives on screen review of payslips and allows amendments after payslips have been printed
- Can only process one department at a time
- Complicated installation and software protection procedures
- Slow cursor movement and bad positioning while entering
- Documentation not very thorough

## UTILITIES

### Mouse and Desktop **Useful!** £79.95 • AMS • 0925 413501

A whole new way of using your PCW — banish CP/M for ever. For your money you get a mouse and software which emulates the GEM Desktop environment found on PCs. All commands are given by pointing to icons on the screen, not typing at the keyboard. You also get calculator/calendar (etc) utilities thrown in.

#### PLUSES • MINUSES

- A genuinely useful desktop organiser, with well thought out utilities.
- Well presented and easy to use
- Makes CP/M commands easy
- The mouse can be used with a variety of other software
- Takes up a lot of space in the M drive
- Calculator and other utilities not available while running other programs
- Can be irritating if you are proficient with CP/M

### Money Manager Plus **Best buy!** £39.95 • Connect Systems Ltd • 01-743 9792

The souped-up version of the personal accounts package Money Manager which would serve a small business quite nicely. It acts as a daily diary, over 12 months, recording all incomings and outgoings between up to 9 accounts. Similar transactions can be grouped together, and simple reports can be printed. Money Manager also available for £24.95.

- Simple to use, requiring no accounts or computer knowledge
- Standing orders can be defined for each month
- Detailed and summary statements can be printed out
- VAT reports can be separated out
- Can present results as bar charts
- No audit trail integrity
- The statement format is not very flexible
- Transfers between accounts are not cross-referenced

### SuperType II **Useful and fun!** £24.95 • Digita International • 03954 5059

A program for users of LocoScript (1 or 2) and CP/M programs, which modifies the fonts (ie the look of the characters) used by the PCW printer. SuperType has 4 'business' fonts and 4 'peppy' fonts, like Old English. It works by directly altering the relevant files for LocoScript or CP/M, so you only need run it once — after that, the new chosen font is automatically available.

#### PLUSES • MINUSES

- Once installed, you can totally forget it's there
- Genuinely useful range of fonts available
- Works with LocoScript as well as CP/M
- All LocoScript's print size and style options still work with SuperType
- Doesn't take up any extra disc space
- You can't mix different fonts in the same document

### The Knife Plus **Vital tool** £19.95 • Hisoft • 0525 718181

An essential tool for retrieving data from corrupted discs. Knife Plus will copy all uncorrupted sectors on to a fresh disc which you can then patch up without risking the original.

#### PLUSES • MINUSES

- Copies all uncorrupted data from damaged disc
- If boot sector damaged, will copy good boot sector onto disc
- Requires some knowledge of basic disc structure
- Manual not written for beginners

### Point of Sale £194.35 • Avon Computers • 0761 70543

For 8512s only. This program turns your PCW into a minimum stock controller — you enter each sale as it happens and at the end of the day your PCW gives you sales reports, stock details and suggested purchase orders.

#### PLUSES • MINUSES

- Good method of stock control for small businesses
- Ties up with many double entry accounts packages
- No on screen prompts for accounts numbers
- No out of stock warning during sales
- Time taken to print out invoices could be inconvenient

### Personal Tax Planner **Money saver!** £24.95 • Digita International • 03954 5059

Simple program which asks you all the questions relevant to your year's tax affairs, and prepares your tax return claim (or bill). Useful to find out whether married couples would be better assessed separately or not, for example. Annual updates available.

#### PLUSES • MINUSES

- Simple to use
- Needs a minimum knowledge of the tax law
- Forces you to keep your tax details in one place
- Limited application — you might only use the program once a year
- Can't handle unusual cases
- Program updates (for a new allowance level) cost £10

# THE GOOD SOFTWARE FILE

## UTILITIES • DESKTOP PUBLISHING

### Signwriter

£49.95 • Wight Scientific • 01-858 2699

Prints out any string of text as a sign in a standard Roman font. Only limit on size of characters is the size of the paper and the quality is very good. Long messages can be printed lengthways on continuous paper. Extra fonts are available for £5.

#### PLUSES • MINUSES

- Good quality print – difficult to believe it's done on a dot matrix printer
- No limit on size of characters
- Text can be boxed and underlined
- Signs take several minutes to print out
- \* You have to pay for extra fonts

### Tas-Sign

£29.95 • Tasman Software • 0525 718181

Takes time to print out but you can print signs of up to five lines of text up to seven inches high with up to 32 characters in each. Four fonts, eight hatching patterns, and you can print lengthways on continuous paper for long signs.

#### PLUSES • MINUSES

- Wide range of fonts and shadings
- Long signs will print out in 'landscape' (sideways) format
- \* Long signs take time
- \* Some symbols (yen signs etc) won't print out on PCW

### Pertmaster

£69.00 • Ablex Software/NewStar • 0277 220573

Pertmaster is a project planning aid. You specify the events, sequencing and durations of the component tasks of a project, and Pertmaster will analyse the job by Critical Path Analysis. It can detect errors in the plan, produce reports and crude graphical summaries.

#### PLUSES • MINUSES

- PERT charts and Critical Path Analysis are established planning methods
- Up to 500 activities may be considered at once
- Plans can be altered to see 'what if ...' results
- \* The PCW isn't really powerful enough to do it justice; it certainly needs a PCW8512
- \* Screen graphics are very weak; you can't get a graphical overview of the whole network
- \* No simple default settings for a rough-and-ready plan

### Write Hand Man

£29.95 • Hisoft • 0525 718181

This utility program sits in the background whatever you are doing – for example, if you are word processing, presses the key and up pops a calculator, a notepad, or a diary. Designed to eliminate paper, but the more advanced functions (notepad) are so cumbersome they fail to be at all useful. Better to buy a £4.95 Casio calculator and a pencil & paper.

#### PLUSES • MINUSES

- Results from calculator can be 'pasted' directly into files
- You can re-define the PCW keys to produce strings
- \* Manual is technical and incomprehensible
- \* Notepad functions are slow and cumbersome to use
- \* Takes up a lot of disc space and CP/M workspace
- \* Costs much more than an HB pencil with notepad

### Universal Self-Start

£19.95 • Cornix Software • 0462 682989

A utility program which helps you make up auto booting discs from any program. This means having a single disc which can both start the PCW up and run your program. Bear in mind that you could do all this yourself for free if you can read the appropriate parts of the CP/M manual.

#### PLUSES • MINUSES

- Foolproof system of questions leads you on
- Wide range of options for printer setup, eg. different paper sizes.
- \* Not comprehensive – doesn't P/P files across to the M drive, for instance
- \* No help with setting up the keyboard
- \* Program takes up 14k of the startup disc – you may need two discs anyway

### BrainStorm

£49.95 • Caxton Software • 01-379 6502

An ideas processor. BrainStorm is a computerised doodling pad. You can jot phrases down randomly, then organise them into a hierarchical plan, then expand each phrase into a finished idea, and finally print them out as a coherent document. If you find it easier to work at a keyboard than with a pencil and paper, this will really help you think.

#### PLUSES • MINUSES

- No limit to the number of sub-levels of plan you can have
- You can output the rough text, for a wordprocessor, to polish
- Good documentation, and some real ideas for applications
- Provides a unique service, which should be useful to you
- \* Needs better graphics to let you browse the structure easily
- \* Command keystrokes are unnatural, eg. cursors don't work
- \* As a word processor, it is very primitive

### Astrocalc

£15.50 • Astrocalc • 0442 51809

A starter program for astrologers. More sophisticated programs to help the interpretation of the charts are also available.

#### PLUSES • MINUSES

- Takes the sweat out of creating natal charts
- Genuine astrological tool – not just a fake horoscope program
- \* No graphical representation of the charts
- \* Tutorial section rather pointless

### Disc Mate

£24.99 • Siren Software • 061 848 9233

Disc Mate is a set of CP/M utility programs which bring complex disc recovery operations within the scope of CP/M novices. Facilities include recovering erased files and making files 'read only' (i.e. unerasable).

#### PLUSES • MINUSES

- Simple on-screen instructions once you've got started
- Allows easy recovery of accidentally erased files
- 'ZIPDISC' program speeds up disc access by 10 to 20%
- Friendly file copying program in case you find CP/M's P/P incomprehensible
- Can read both single and double density discs
- \* The instruction sheet is very brief, so you'll need to understand CP/M basics

### The Desktop Publisher

Great value!

£29.95 • Database Software • 061-480 0171

A tremendous value for money package. Graphics and text boxes can be easily moved around and page layout is clear. You can edit text from within the program, using LocoScript-like commands to set bold and italics. Good range of fonts and graphics too – all at half the price of its rivals! Mouse optional for £50 more.

#### PLUSES • MINUSES

- Text editor allows you to edit articles to fill the space easily
- Boxes and general layout easy to manipulate
- Works with three mice, but fine with keyboard alone
- Half the price of other packages
- Good range of fonts and graphics, and you can design your own fonts using the font editor
- \* Text boxes always expand if incoming text is too long – you can't fix their size beforehand
- \* Headlines can look a bit jagged

### Newsdesk International

£49.95 • The Electric Studio • 0462 675666

Versatile package with a very wide range of graphics facilities and high quality headline text. Page make-up is flexible, though the program can be a bit cumbersome and slow, especially in text handling. Includes all the facilities of Electric Studio's 'Art' graphics package.

#### PLUSES • MINUSES

- Good control over the elements on the page
- Powerful graphics facilities
- Good quality print in headlines and large fonts
- Can use font editor to create your own high quality fonts
- \* Text handling slow and cumbersome
- \* Not easy to undo mistakes
- \* Menus can be confusing

### Fleet Street Editor Plus

£69.95 • Mirrorsoft • 01-377 4645

A versatile and powerful package. You can create template-like 'page dummies' if your publication has several pages of the same format and handling of text, setting of margins and size of text boxes etc, is well controlled. Tends to stop working abruptly for no reason though and uses memory space extravagantly.

#### PLUSES • MINUSES

- Versatile integrated package
- Text handling sophisticated and controlled
- Can edit text from keyboard
- \* Crashes occasionally
- \* Odd use of memory in text editor

### Fleet Street Font Editor

£19.95 • Mirrorsoft • 01-377 4645

An add-on to Fleet Street Editor plus. You can design your own fonts or symbols and there are five more fonts you can use in FSE+. There's also a selection of useful extra graphics.

#### PLUSES • MINUSES

- Designing your own fonts is fun and easy
- Extra graphics will be useful
- \* You're paying twenty quid for something the other DTP programs have built-in for free
- \* Maximum of five fonts in FSE mean when adding a new font to your FSE disc one of the others has to go
- \* Not much for your money

# DESKTOP PUBLISHING

Desktop publishing – or DTP – packages enable you to produce your own newsletters using your PCW. They come with a variety of fonts of a range of sizes for headlines and body text and a selection of 'clip art' graphics you can include in your creations (pictures of various objects and fancy heading boxes such as 'For Sale' or 'Stop Press').

You read in your articles prepared by a word processor into text boxes. If you can't edit the text from within the program, you have to go back to your word processor to fine-tune the article to fit – this is very tedious. Then you put your graphics in graphics boxes, make up your

headlines, and then lay out your publication on the PCW by juggling the position of your boxes on each page. Finally you can get a copy of each page on your printer (though not if it's a daisywheel, of course, as on the 9512) and photocopy the results.

Your graphics can be taken either from the package itself or from TV or real life via a video digitiser.

The end results won't be of sufficient quality to compete with the professionals, but for club and company newsletters, leaflets, posters and small-scale publications, DTP packages could be invaluable.

## NEXT MONTH

The guide continues with DATABASES, COMMUNICATIONS, EDUCATIONAL PACKAGES and PROGRAMMING. After that it's SPREADSHEETS, GRAPHICS and GAMES and the month after that it's back to this month's categories.

Our intention is to keep publishing the three parts of the guide in rotation, updating it each month to include all new products. If you would like to see other sections of the guide, back issues of 8000 Plus are available from our Somerton address at £1.75 each.

Meanwhile, if you are aware of any significant errors or omissions in the File as published, please let us know. We want to maintain it as THE authoritative guide to PCW software.

## FREE MEMBERSHIP

### The Mira PCW User Group

We invite New Members to Join our  
Expanding PCW User Group

- 1) Low Cost Software
- 2) Public Domain Library
- 3) Monthly Magazine
- 4) Low Cost Second Hand Equipment from other members.

A4 S.A.E. To: **MIRA GROUP**  
577 Huddersfield Road  
Dewsbury, WF13 3JW

## LOW PRICED SOFTWARE SPECIALLY WRITTEN FOR THE PCWs

### EXPRESS LABELLER

Sell contained, easy and fast to use.  
Many useful features, it's all you need: £11.95

### TAXIBASE

Private Hire/Taxi operators' mini-database that replaces those  
searches through back diaries for quotation material etc. Selective  
searches: £9.50

### LEARNING BASIC?

For those struggling with Jetsam: demo programs that are tutorial  
and useful, with manual: £9.50

All prices include VAT & Postage — State which PCW

**MCS — 49 Cogate Road — Paddock Wood —**  
**Kent — TN12 6UD**  
**Tel: Paddock Wood (089 283) 3056**

## THE BEST IN THE WEST — PLUS!!!

The **3M 383 SCOTCH COPIER** — fully guaranteed by 3M. The smallest and  
cheapest copier in the world — comes with 50 FREE copies ... £129.75  
Photocopy paper always available by return post at discount prices

PCW's/PC's very very low price new  
SBS 5" head cleaners—special

386 2nd disk drive	129.95
Memory Upgrade to 512K	55.00
FDS & Memory Upgrade	137.95
5.5" 40/80 track drive	139.50
5.5" 80 track	129.50
Interface for 2nd drive	49.50
Interface for 3 drives	59.50
Pace 40/80 5.25" + TDOS	179.95
Peartree 5.5" plinth drive	179.95
Just 6100 Daisywheel printer	118.00
Citizen 55 Daisywheel printer	99.00
ASD PCW Hard Disk 10Mb	339.95
ASD PCW Hard Disk 20Mb	539.95
AMS/PAN disk N 10	21.95
Printer ribbons 2 for	7.49
Pace RS555 Interface	59.95
BBQ disk cover set — PCW	11.55
Kempston joystick/Interface	54.95
Modems from only	95.95

Printer	49.95
Pocket Protect	52.50
Prospex	52.50
New Word II	51.50
Wordstar de Luxe	58.50
Tasword 8000	18.55
Tas-spell 8000	12.75
Tasprint 8000	13.85
Tas-sign	53.95

First Calc	26.85
Supercalc II	59.75
Cracker II	38.75

Sage Chit Chat Combo	69.50
Chit Chat 'E' Mail	50.50
Chit Chat View Data	54.50
Chit Chat/Modem/View Data	159.99
Chit Chat/Modem/Combo	199.00
Chit Chat/Modem/E Mail	159.99

Fleet/Ed Editor Plus	19.75
Newsdesk International	37.75
Kempston Mouse	59.95
K. Mouse & Fleet Sr Editor+	115.95
K. Mouse & Write Hand Man	78.00
DA Draw	55.95
Dr Graph	55.95
Elec Studio Light Pen	65.95
Elec Studio Pen + Graphics	69.95
Elec Studio Mouse + Graphics	105.50

Masterfile 8000	37.45
Cambase	36.75
dBase II	79.50
dBase II made easy-book	18.95
Hands on dBase II — disk	19.95
Database Manager — At Last	22.75
Condor I	79.85
Delta I 55	73.50
Minerva — First Base	56.85
Carson — Card Box	83.55
Cave Reserve	55.89
Saxon Micro Collection	59.95

Animal, Vegetable, mineral	15.46
World Wise	15.46
Leaderboard Golf	18.50
Boulder	18.95
Coloson 8 Chess	15.75
3D Clock Chess	15.75
Cyrus II Chess	15.75
The Pawn	15.95
Trend Pursuit	15.95
Tomahawk	15.75
Frank Bruno Boxing	15.95
Scargilder	18.75
Head Over Heels	12.50
Jewels of Darkness	15.95
Dissections	15.95
Batman	13.25
Steve Davis Snooker	11.95
Hitch Hiker's Guide	19.75
Stinky Force Harrier	15.75
Leather Goddesses	18.89

Micro Simplex	87.80
CORNIX	27.95
Simple Accounts	39.45
Simple — Est ver	39.95
Job estimating	39.95
Product costing	39.95
QUEST BUSINESS CONTROL	79.95
Int A/Cs Sales/Invoicing/Stock	79.95
Purchase Ledger	56.95
Nominal ledger	56.95
Word Link — for Wordstar users in more	29.95
reorder — 75 low inv. Stock sort -	29.95
arranges records	29.95
Above three at (each)	89.95
File sander	79.95
Cash Trader	129.05
Cash trader & analyser	129.05

CASHSOFT	99.75
PSLN int-mock/in-sales/purchase	99.75
PSLN int-sales/purchase	78.50
PSLN int-stock/in-sales	78.50
PSLN stock control	52.50
PSLN nominal ledger	37.50
PSLN invoicing	52.50
PSLN purchasing	52.50

MAP	104.50
Integrated accounts	104.50
Nominal ledger	39.50
Payroll	39.75
Purchase Ledger	39.75
Sales Ledger	39.75
Stock	39.75
SAGE	79.50
Popular accounts	79.50
Popular accounts plus	104.50
Popular accounts super combo	188.50

Landscapes — Realistic	19.95
Armor 'C'	39.75
Armor Maxum II	39.75
Armor BCPL	52.75

GOT CAUGHT RECENTLY!	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

PCW's/PC's very very low price new  
SBS 5" head cleaners—special

386 2nd disk drive	129.95
Memory Upgrade to 512K	55.00
FDS & Memory Upgrade	137.95
5.5" 40/80 track drive	139.50
5.5" 80 track	129.50
Interface for 2nd drive	49.50
Interface for 3 drives	59.50
Pace 40/80 5.25" + TDOS	179.95
Peartree 5.5" plinth drive	179.95
Just 6100 Daisywheel printer	118.00
Citizen 55 Daisywheel printer	99.00
ASD PCW Hard Disk 10Mb	339.95
ASD PCW Hard Disk 20Mb	539.95
AMS/PAN disk N 10	21.95
Printer ribbons 2 for	7.49
Pace RS555 Interface	59.95
BBQ disk cover set — PCW	11.55
Kempston joystick/Interface	54.95
Modems from only	95.95

Printer	49.95
Pocket Protect	52.50
Prospex	52.50
New Word II	51.50
Wordstar de Luxe	58.50
Tasword 8000	18.55
Tas-spell 8000	12.75
Tasprint 8000	13.85
Tas-sign	53.95

First Calc	26.85
Supercalc II	59.75
Cracker II	38.75

Sage Chit Chat Combo	69.50
Chit Chat 'E' Mail	50.50
Chit Chat View Data	54.50
Chit Chat/Modem/View Data	159.99
Chit Chat/Modem/Combo	199.00
Chit Chat/Modem/E Mail	159.99

Fleet/Ed Editor Plus	19.75
Newsdesk International	37.75
Kempston Mouse	59.95
K. Mouse & Fleet Sr Editor+	115.95
K. Mouse & Write Hand Man	78.00
DA Draw	55.95
Dr Graph	55.95
Elec Studio Light Pen	65.95
Elec Studio Pen + Graphics	69.95
Elec Studio Mouse + Graphics	105.50

Masterfile 8000	37.45
Cambase	36.75
dBase II	79.50
dBase II made easy-book	18.95
Hands on dBase II — disk	19.95
Database Manager — At Last	22.75
Condor I	79.85
Delta I 55	73.50
Minerva — First Base	56.85
Carson — Card Box	83.55
Cave Reserve	55.89
Saxon Micro Collection	59.95

Animal, Vegetable, mineral	15.46
World Wise	15.46
Leaderboard Golf	18.50
Boulder	18.95
Coloson 8 Chess	15.75
3D Clock Chess	15.75
Cyrus II Chess	15.75
The Pawn	15.95
Trend Pursuit	15.95
Tomahawk	15.75
Frank Bruno Boxing	15.95
Scargilder	18.75
Head Over Heels	12.50
Jewels of Darkness	15.95
Dissections	15.95
Batman	13.25
Steve Davis Snooker	11.95
Hitch Hiker's Guide	19.75
Stinky Force Harrier	15.75
Leather Goddesses	18.89

Micro Simplex	87.80
CORNIX	27.95
Simple Accounts	39.45
Simple — Est ver	39.95
Job estimating	39.95
Product costing	39.95
QUEST BUSINESS CONTROL	79.95
Int A/Cs Sales/Invoicing/Stock	79.95
Purchase Ledger	56.95
Nominal ledger	56.95
Word Link — for Wordstar users in more	29.95
reorder — 75 low inv. Stock sort -	29.95
arranges records	29.95
Above three at (each)	89.95
File sander	79.95
Cash Trader	129.05
Cash trader & analyser	129.05

CASHSOFT	99.75
PSLN int-mock/in-sales/purchase	99.75
PSLN int-sales/purchase	78.50
PSLN int-stock/in-sales	78.50
PSLN stock control	52.50
PSLN nominal ledger	37.50
PSLN invoicing	52.50
PSLN purchasing	52.50

MAP	104.50
Integrated accounts	104.50
Nominal ledger	39.50
Payroll	39.75
Purchase Ledger	39.75
Sales Ledger	39.75
Stock	39.75
SAGE	79.50
Popular accounts	79.50
Popular accounts plus	104.50
Popular accounts super combo	188.50

Landscapes — Realistic	19.95
Armor 'C'	39.75
Armor Maxum II	39.75
Armor BCPL	52.75

GOT CAUGHT RECENTLY!	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

Then Get—	23.40
Meridian Stockmarket	23.40
Synex Sharemaster	79.75

PCW's/PC's very very low price new  
SBS 5" head cleaners—special

386 2nd disk drive	129.95
Memory Upgrade to 512K	55.00
FDS & Memory Upgrade	137.95
5.5" 40/80 track drive	139.50
5.5" 80 track	129.50
Interface for 2nd drive	49.50
Interface for 3 drives	59.50
Pace 40/80 5.25" + TDOS	179.95
Peartree 5.5" plinth drive	179.95
Just 6100 Daisywheel printer	118.00
Citizen 55 Daisywheel printer	99.00
ASD PCW Hard Disk 10Mb	339.95
ASD PCW Hard Disk 20Mb	539.95
AMS/PAN disk N 10	21.95
Printer ribbons 2 for	7.49
Pace RS555 Interface	59.95
BBQ disk cover set — PCW	11.55
Kempston joystick/Interface	54.95
Modems from only	95.95

Printer	49.95
Pocket Protect	52.50
Prospex	52.50
New Word II	51.50
Wordstar de Luxe	58.50
Tasword 8000	18.55
Tas-spell 8000	12.75
Tasprint 8000	13.85
Tas-sign	53.95

First Calc	26.85
Supercalc II	59.75
Cracker II	38.75

Sage Chit Chat Combo	69.50
Chit Chat 'E' Mail	50.50
Chit Chat View Data	54.50
Chit Chat/Modem/View Data	159.99
Chit Chat/Modem/Combo	199.00
Chit Chat/Modem/E Mail	159.99

Popular accounts plus .....	104
Popular accounts super combo .....	100
<b>LANCUPS</b>	
Landscape -- Rocale .....	10

ACCESS / VISA  
HOTLINE

☎ 0458 74011  
(24 hours)

## ORDER FORM No. 17

Use this form to order either a subscription or special offers by ticking the items you require. All special offer goods are sent by 1st class post, normally within five days of receipt of order. But please allow 28 days in case of temporary shortages

Name

Address

Post code

### ☐ SUBSCRIPTION £17.95

(Inc free gift pack.)

If you are an existing subscriber wishing to extend your subscription, please tick here: ☐

### ☐ 8000 PLUS GIFT PACK £8.95

(Existing subscribers only)

☐ THING1 (left of screen) £5.95

☐ THING1 (right of screen) £5.95

....Pkt(s) DISK LABELS £1.00 ea  
(Enter number required)

☐ DUST COVERS 8256/8512 £11.95

☐ DUST COVERS 9512 £12.95

☐ BINDER £4.95

☐ 3 HIGHLIGHTER PENS £1.50

☐ MINI OFFICE PROFESSIONAL £24.95

☐ SCRABBLE £12.95

☐ BASIC MANUAL (+ pens) £9.95

☐ DESKTOP PUBLISHING BOOK £8.50

☐ LOCOSCRIPT 2 BOOK (+ pens) £11.95

### PICK OF THE MONTH:

☐ THE PAWN £19.95

☐ HEAD OVER HEELS £9.95

☐ HITCH-HIKER'S GUIDE £19.95

☐ COLOSSUS CHESS £10.95

### BACK ISSUES:

☐ Issue 5 £1.50 ☐ Issue 7 £1.50

☐ Issue 8 £1.50 ☐ Issue 9 £1.75

☐ Issue 10 £1.75 ☐ Issue 11 £1.75

☐ Issue 12 £1.75 ☐ Issue 13 £1.75

☐ Issue 14 £1.75 ☐ Issue 15 £1.75

☐ Issue 16 £1.75

### PAYMENT DETAILS

Value of total order £   
(min order £2.00)

Payment is by (please circle)

**Cheque • PO • Access • Visa**

Make payable to FUTURE PUBLISHING LTD.

Your credit card number is

Expiry date

Send this form plus payment to  
SPECIAL OFFERS • 8000 PLUS  
SOMERTON • SOMERSET • TA11 7PY

# COMPUTER SCRABBLE

Only £12.95 – save £7!!

■ Anyone who enjoys playing with words will find it hard to resist this superb version of the classic word-game.

■ Scrabble on the PCW, supplied by Leisure Genius, presents you with a unique challenge: Can you beat your word processor at word processing?

■ Be warned. The program, backed up by a huge built-in dictionary, plays a very mean game. It knows all the rules and will use every trick in the book to build up mind-boggling scores.

■ The full Scrabble board is displayed on the screen with all the squares in their usual places. More than one player can take on the computer simultaneously, and you can set the program's level from super-fast to super-smart. There are other options, including the facility to see the computer trying out various words.

■ The program also checks your words against its dictionary and will query any it doesn't recognise – but yes, you can overrule it. Much friendlier than a human opponent in that regard.

■ It's just as well, because you'll need all the help you can get if you're to beat the machine.

■ A fantastic program at an amazing bargain price



## 8000 PLUS BACK ISSUES

We have limited quantities of the back issues listed below. The prices include a nominal 25p postage. All issues contain excellent TipOff sections and a selection of BASIC listings, plus the other regulars. Don't miss the chance to expand your collection.

### Issues 1-4. SOLD OUT!

**Issue 5.** £1.50 Printer survey. Reviews of Protexl, Trivial Pursuit, Strike Force Harrier. Business letters layout. SETSIO and DEVICE commands explained.

### Issue 6 SOLD OUT!

**Issue 7** £1.50 Spreadsheets special. LocoScript troubleshooting. Reviews of Cavalier accounts, Personal Tax Planner, Stockmarket packages, Adrian Mole.

**Issue 8** £1.50 LocoScript 2 in depth review. Comms packages compared. AMX Desktop reviewed, plus Starglider, Southern Belle, Steve Davis Snooker, File Manager.

**Issue 9** £1.75 Free packet of disc labels. Fleet SI Editor Plus. Expanding your memory Using LocoMail. CPM's SID utility. Reviews of Head Over Heels, home finance programs, Accounts made easy.

**Issue 10** £1.75 Graphics packages compared. £10 database. More on LocoMail, LocoScript templates. Holshot reviewed. Teach yourself Logo.

**Issue 11** £1.75 How to recover lost disc data. Installing a second drive. The SUBMIT command. Reviews of Desktop Publisher, Red Boxes, Leaderboard.

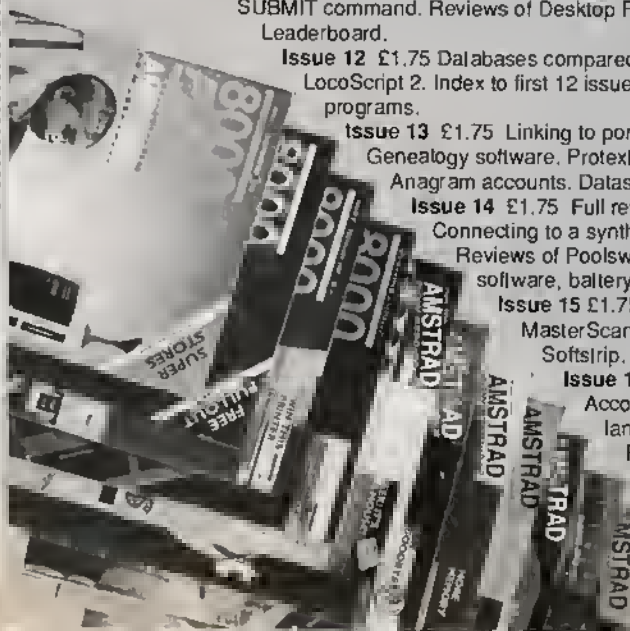
**Issue 12** £1.75 Databases compared. Using Jetsam. Getting into LocoScript 2. Index to first 12 issues. Reviews of Arnor's C, Bridge programs.

**Issue 13** £1.75 Linking to portables. PIP revealed. Genealogy software. Protexl and Hitch-hiker's tips. Anagram accounts. Datasore. Fleet Street Editor fonts.

**Issue 14** £1.75 Full review of the PCW 9512. Connecting to a synthesizer. LocoScript 2 wallchart. Reviews of Poolswinner, low-cost business software, battery backups.

**Issue 15** £1.75 Artificial Intelligence. MasterScan digitiser. Training courses. Softstrip.

**Issue 16** £1.75 Budget printer survey. Accounts packages. Programming languages. Mini Office Professional full review.



## BARGAIN BUYS!!

### ■ OFFICIAL BASIC MANUAL

Only £9.95 – with FREE pack of highlighter pens!

Your PCW system disc includes Mallard BASIC, the excellent version of the programming language BASIC written by Locomotive Software. The only trouble is there's no proper documentation for it with the machine (unless you were a very early purchaser of the 8256).

But now you can develop your programming ability with the aid of the latest version of the official Locomotive manual, an excellent, well-presented book running to over 400 pages.

It covers all commands available in Mallard BASIC in full detail, backed up with numerous examples and sample listings. Any differences relevant to the different PCW models are pointed out in the text. The new version also includes a much expanded tutorial section intended to teach BASIC programming from scratch. There is also full coverage given to the GSX graphics commands and the Jetsam file storage system.

If you want to use your PCW for more than just word-processing, this book can open the door.

Oh, and because there will be numerous bits you'll want to return to quickly, we're throwing in a free set of 8000 Plus highlighter pens so that you can mark key passages! An excellent buy.



### ■ MINI OFFICE PROFESSIONAL

Usually £29.95 NOW ONLY £24.95

The January 1988 issue of 8000 Plus said that Mini Office Professional offers "five genuinely powerful programs for the price of one". The five programs – provided on two discs – are a database, a spreadsheet, a graphics program, a word processor and communications functions. Together they comprise the most useful integrated package you're ever likely to find on the PCW. Features include sideways printing (often not found on

spreadsheets costing twice as much on their own), pie charts, line graphs, bar charts, Prestel compatibility, and word processing speeds that surpass LocoScript 2, search-and-replace and scores of other features!

This could be one of the best purchases ever for your PCW. Why pay more for single programs when you could get five of the best for under £25?!

Call us now on 0458 74011 and ask for Mini Office Professional.

Only £19.95! (RRP£24.95)

### ■ LOCOSCRIPT 2 & AMSTRAD PCW'S

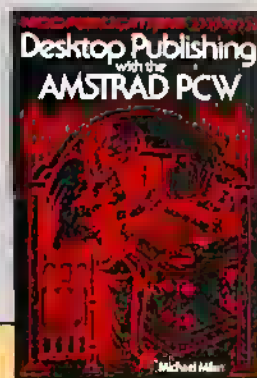
Now £11.95 – with FREE pack of highlighter pens!

Written by John Hughes and published by Sigma Press, this is a friendly, down-to-earth and readable guide to LocoScript 2. Whether you're a first-time 9512 user or are converting from LocoScript 1, this will tell you all you need to know about using different printers, LocoMail, LocoSpell, and even gives you an introduction to the world of CP/M software. If you find the manual a bit daunting, then this is for you!

### ■ DESKTOP PUBLISHING WITH THE AMSTRAD PCW

Just £8.50 – save £1 on cover price

Written by Mike Milan and published by the NCC, this book is an essential purchase – preferably *before* you buy any DTP software so's you know what you're letting yourself in for! Marvellous things can be achieved with a DTP package, but it's as well to know what you can and can't do before you part with your money. Page layout, reproduction methods, printers, fonts, trim marks, photo layouts – all are explained in Mike Milan's heartening prose. An essential companion to the desktop publisher!



## PICK OF THE MONTH

Save £5 on these  
Top PCW entertainment programs!

### ■ HEAD OVER HEELS

The incredibly animated program from Ocean in which you control TWO separate characters, using their different abilities to solve some mind-bending puzzles. Huge playing area and probably the best graphics on the PCW. Plus totally absorbing gameplay.

Only £9.95! (RRP £14.95)



### ■ HITCH-HIKER'S GUIDE TO THE GALAXY

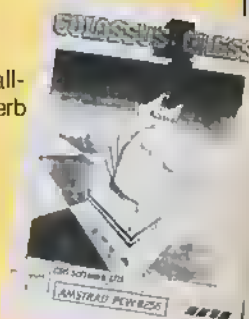
The hilarious adventure from Infocom based on the Douglas Adams book. Combines ingenious puzzles with the wackiest humour of any computer game. Solve it inside two months and you're a genius

Only £19.95! (RRP £24.95)

### ■ COLOSSUS CHESS

CDS Software's game rates as one of the all-time classic computer chess masters. Superb graphics bring the game alive in three dimensions, and as well as powerful play on several levels it features full instructions with options including take-back, replay and suggested moves. Suitable for beginner or serious players.

Only £14.95! (RRP £19.95)



### ■ THE PAWN

Rainbird's graphic adventure game set in a mysterious kingdom of ice towers, golden palaces and dangerous forests. The game combines gorgeous pictures with effective text descriptions and strong character interaction.

## HOW TO ORDER

Just fill in the order form on the left of this page. Or use our Access Visa hotline on 0458 74011.

# SPECIAL OFFERS 8000 PLUS



## MAGAZINE BINDERS

Store up to 12 issues for just £4.95

8000 Plus, we humbly suggest, is a magazine worth collecting. Our sturdy, custom-built binders provide the best way of keeping your copies tidy, in good condition and instantly available. Each one is designed to hold 12 copies of 8000 Plus and preserve them for posterity – and easy future reference.

Individual magazines are held in place by one of 12 wires. And the binders look good too. They're coloured a rich green with the magazine logo printed in blocked Newvap Gold on the spine and front. Buy one and watch your 8000 Plus collection grow into a comprehensive library of PCW info.

## 8000 PLUS DUST COVERS

3-piece set for 8256/8512 only £11.95

3-piece set for 9512 only £12.95

Let's face it, computers don't like dust. Over a period of time it can make them very ill indeed: keyboards stick, disk drives become less reliable, printer mechanisms clog up.

A set of dust covers for the three parts of your system provides a neat solution. And there's the added bonus of smartening up the hardware's appearance when it's not in use.

The specially-commissioned 8000 Plus covers are made from high-quality, anti-static nylon fabric. The sets for the 8000 series machines are coloured a soft grey with smart red piping for the monitor and printer covers. For the 9512, the covers are ivory piped with brown. Both sets include the 8000 Plus logo printed on the keyboard cover.

It all adds up to a good argument for a cover up.



## THE THINGI

Only £5.95 – save £2!

What's white, dangles paper next to your computer screen, and costs two pounds less than in the shops? Yes, a Thingi bought through 8000 Plus.

This remarkable computer accessory – an idea so simple it's ingenious – could dramatically ease your hours at the keyboard. It's basically a cleverly-shaped piece of plastic that attaches via Velcro to the top of your micro. But with a Thingi on your PCW you can have documents, letters or program listings clipped right next to the screen in perfect reading position. Any task involving copying off paper is thereby made much easier and faster. In fact, the coloured clip supplied is sturdy enough to support an issue of 8000 Plus open, say, at the Listings section.

The Thingi comes in two versions one for positioning to the left of the screen, the other to the right – the Velcro attachment allows easy readjustment or temporary removal.

A sensible, cost-effective add-on for your PCW.

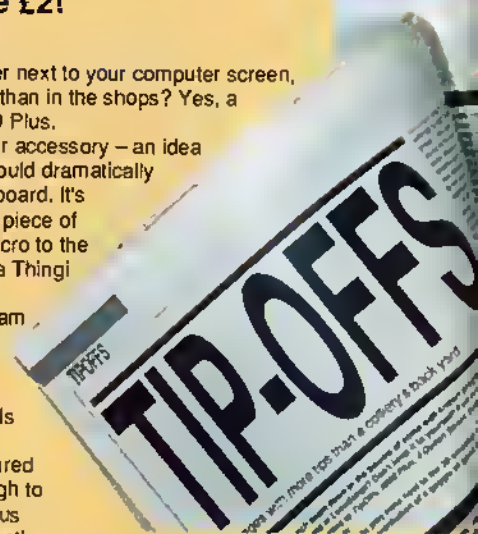
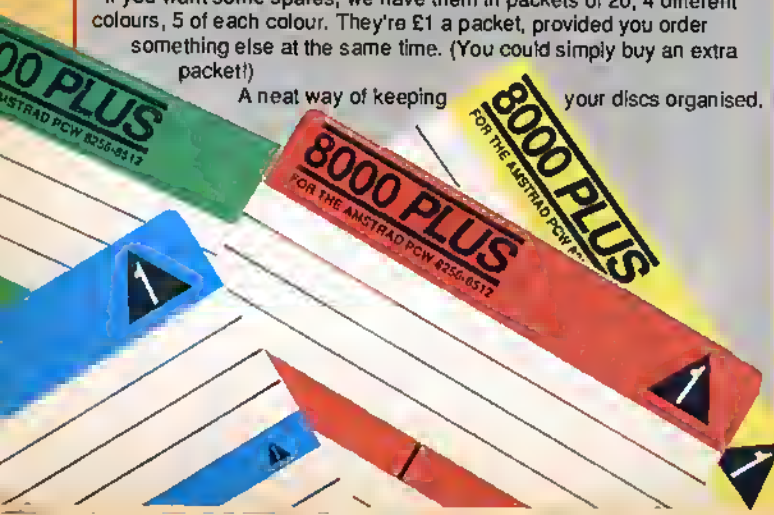
## 8000 PLUS DISC LABELS

Packet of 20 for £1, (when ordered with another product)

One of the most annoying things about 3" discs is that they aren't normally supplied with spare labels. That's why we designed our own (and gave away over 300,000 with the June issue of 8000 Plus).

If you want some spares, we have them in packets of 20, 4 different colours, 5 of each colour. They're £1 a packet, provided you order something else at the same time. (You could simply buy an extra packet!)

A neat way of keeping your discs organised.



## HOW TO ORDER

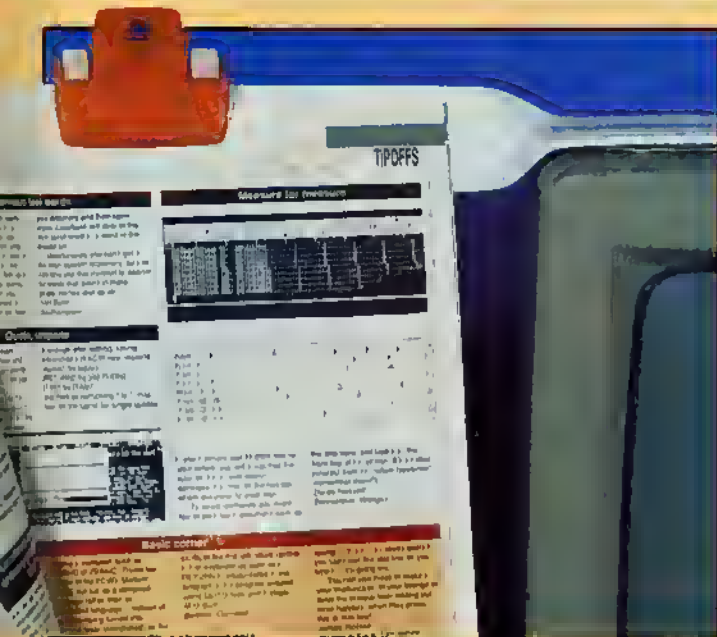
Just turn back one page and fill in the order form. Or use our Access/Visa hotline on 0458 74011.

## HIGHLIGHTER PENS

Three for £1.50

Anyone who uses computers a lot, can make use of highlighter pens. For marking the important lines in a document or printout or program listing. For ensuring a key sentence in a manual isn't forgotten. Or just for highlighting the main points in an 8000 Plus article.

We're offering a set of three different-coloured 8000 Plus-stamped pens in a clear plastic wallet for just £1.50. They're high-quality and long-lasting. A good way of focussing attention on things that matter.



## HOW TO ORDER

Just turn back one page and fill in the order form. Or use our Access/Visa hotline on 0458 74011.

# Subscribe to the leading Amstrad PCW magazine and we'll send you free goods worth over £12!

## THE 8000 PLUS GIFT PACK

- THREE blank Amstrad 3-inch disks (suitable for any PCW, drive A or B).
- TWO packets of colour-coded disk labels (40 in total).
- ONE set of three highlighter pens.

**INTERESTING FACT** 8000 Plus has one of the highest percentages of postal subscribers of any magazine in the UK. Most PCW users would appear to be incredibly enthusiastic about their machines and rely on the magazine for a regular source of tips, reviews and general advice. It's the only way of keeping properly in touch with the bubbling, constantly-changing PCW scene.

Paying £17.95 for a year's subscription won't save you much on newsstand prices. But it does mean you'll get a copy every month delivered hot off the press direct to your door. No more frustrating searches through newsagents who've already sold out.

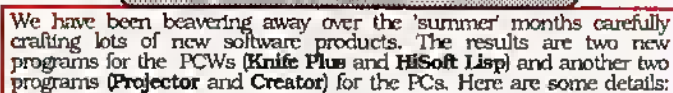
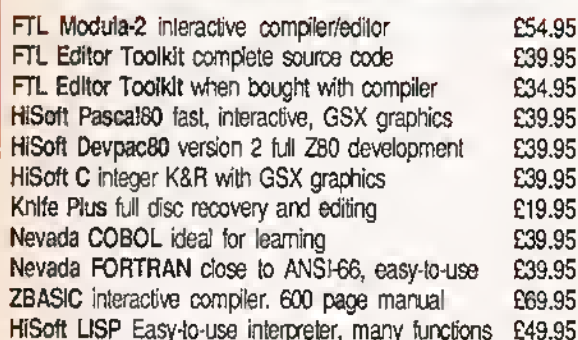
The current success of the magazine means we're also able to offer new subscribers a special gift-pack containing goods worth £12.47 at recommended retail prices.

NOW have we persuaded you...?

### Subscribe already?

If you'd like a gift pack, but already have a subscription to 8000 Plus, you can buy the pack at a special discount price of £8.95. Just tick the relevant option on the form. (This offer is open only to existing subscribers)

HiSoft has been producing languages and utilities for the popular home computers for the last 8 years and we have a very wide experience in this area. Here is our collection of development tools on a selection of Amstrads; please feel free to ring our friendly sales staff if you want any more information or advice on which language to use. We don't just sell programs, we use them ourselves every day.

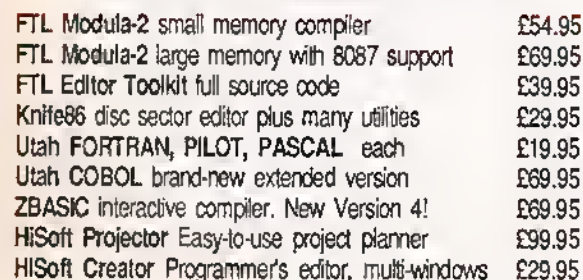


**Knife Plus** is the *ultimate* disc recovery system for your PCW computers. How many times have you lost files or complete discs when using Loscript or CP/M? Or accidentally crashed programs? Now there is hope with Knife Plus. Definitely a cut above the rest, Knife Plus includes a full sector editor, sector copier, build-file option, many utilities and an informative manual. A snip!

**HiSoft Lisp** is a powerful Lisp interpreter with over 300 functions. Based on Common Lisp with libraries for MacLisp & InterLisp, HiSoft Lisp comes with a fully interactive editor, C/P/M file handling, m/c code interface, ring-bound manual and is packaged with an excellent tutorial book by Tony Hasmere with many example programs on disc. HiSoft Lisp is ideal for beginner and expert alike.

**HiSoft Projector** is an easy-to-use, professional project management package for the PC. Using a unique form of graphical display, Projector allows up to 999 activities onscreen: you can edit the activity dependencies, the timing data, resource utilisation and you can try out many *what-if* scenarios with a variety of powerful algorithms. Histograms, barcharts, schedules, calendars and networks are all printed in a clear, organised way. You'll wonder how you ever did anything without Projector!

**HiSoft Creator** is a complete, versatile programmer's editor carefully designed for quick-and-easy use. Split-screen editing, macros, full block handling, auto-indenting, large file size, optional word-wrap, command shell, on-line Help etc. all make Creator a joy to use.



Prices include VAT and postage within the UK. Order by telephone using Access/Visa or send a cheque/postal order to the address below. We despatch by first class post and delivery is usually within 5 working days. Please write or phone for a full catalogue, trade details, export information etc. Remember to state your computer when ordering or requesting a catalogue.

**Tel: (0525) 718181 Order Hotline: (0525) 718271**

**HiSoft**  
High Quality Software

# POSTSCRIPT

A plethora of pithy post perused and presented by a pensive Ed.

## Help a cleric

I am a clergyman who is hoping soon to lay my hands on a PCW for use in my parish work. I wonder if I could use your PostScript columns to ask other clergy who already have the machines in what capacity they find them useful, what software it would be worth getting hold of etc?

Also I would imagine that under the Data Protection Act if I were to use the PCW to keep records of parishioners on disc I would need to register. Could you let me know how I might go about this, and what fees might be involved?

Revd M Komor  
50 Allen St, Mountain Ash, Mid Glam. CF45 4BB

● You will have to register under the Data Protection Act. The address to write to for a form and information pack is The Data Protection Registrar, Springfield House, Water Lane, Wilmslow SK9 5AX. Registration typically costs around £40.

## Protex on the 9512

I have some problems concerning 8/9512 PCWs on which I would appreciate some help. I use an 8512 at work and am considering replacing my Amstrad CPC6128 with a PCW9512 for home use. Naturally, I want to create material on one to use on the other.

1. Is Protex, version 2.07, totally compatible with the 9512? If so, how does it instruct the 9512 printer as the only daisywheel program it has is that for the Juki 6100? My local retailer says that he has been told that it is only partially compatible and that the dictionary, among other things, won't work on the 9512. If it isn't compatible, when do Amstrad propose to issue a 9512 version and will that be suitable for the 8512 as well?

2. My 6128 can write to a Protex DFORMD 8512 created disc and this can then be read by

Welcome to PostScript – the pages where you can pass comment, sound off, ask for help or challenge our opinions. This month's batch of letters roams far and wide over all topics from the laws of supply and demand in New Zealand to colouring doughnut shaped planets. Read on and widen your education.

We'd like to hear from all of you – send your two pen'orth in to *PostScript*, 8000 Plus, 4 Queen Street, Bath BA1 1EJ. We can't undertake to give personal replies, we're too busy writing the next issue! Long letters may be edited.

the 8512, Drive B. Can the 8512 read Protex files that were written on a disc using the 9512 and vice-versa, thus allowing creation of a file on one machine but printing on the other?

3. Will a 9512 be able to load and run Cardbox Plus, which at present runs on the 8512? My 6128 flatly refuses to do so or even to acknowledge that the program

exists on the disc. Also, will it run an 8512 version of First Calc?

Some help on these problems, through the pages of 8000 Plus, would be appreciated.

G Guilbert  
Guernsey, Channel Islands

● Protex will run on the 9512, with a couple of snags (although Amstrad say a 9512 version should be out by the time you read

this – check up on 0733 239011). You can spell check a file but you can't store changes to the dictionary (because the 9512 cannot write to single density discs, which the dictionary disc is). There is no problem printing – the Juki driver is suitable, and anyway the 9512 printer can emulate the 8000 printer if it needs to.

As to questions 2 and 3, 'yes' and 'yes', 'yes'.

## Hopeful castaway

Let me be the first to claim a refund of my sub for pointing out your deliberate mistake in Desert Island Tipoff no 7 (December issue). At the end of the first para [JUL [-]LP should surely be [-]UL[-]LP. Just think, if you don't publish this, that poor fellow on the desert island will be condemned to underlining that goes on for ever and ever...

Christopher McCready  
Oxford

## 8000 Plugs

I was amazed at the resemblance between Alec Rae and the picture that we used on our VIDI video digitiser's British Microcomputing special award press release [Keywords, issue 15].

Perhaps we had overestimated VIDI's true to life frame grabbing ability? Perhaps Alec Rae has a double? I determined to find out so as to prove that we were right and you were wrong.

I asked the person responsible for compiling the photo who exactly he had videoed for the picture in question. Back came the reply – "Oh, that one... I found it on a disc

## Interfering thoughts

I use the 9512 on premises with a landlord whom I would like to keep on good terms with. However, he has been complaining loudly that ever since I have had this machine (having previously used an 8256) he is getting very upsetting noises from his intercom whenever the machine is heavily in use. Having got no help at all from Wildings, where the machine was purchased, a friendly technician at Amstrad suggested that surrounding the side and rear of the machine with chicken wire and/or tin foil might help.

Having traipsed around the west end of London trying to find some chicken wire, I now have the machine covered in this, as well as tin foil for good measure. It works. It does however, look awful and whilst it may be quite fetching and seasonal dressed up with cotton wool and a red scarf



during Christmas, I still have not given up hope that there may be a more aesthetic solution to this problem for the rest of the year.  
Ingrid Hankins  
London W12

● There are two kinds of interference that electrical equipment can cause – radio frequency emissions and mains spikes. Since you say that surrounding your PCW in tin foil cures it, you must be suffering from the first kind. Either complain to your dealer and try a different 9512, or use your PCW in the garden shed (the effect diminishes with distance), or do as you have with metal screening to construct a 'Faraday Cage' to shield the PCW.

Another kind of interference is mains spikes (bridges cause a lot of this when their pumps switch on and off). You can buy filters and smoothing units which protect your computer from the mains and vice versa.

# POSTSCRIPT

we got back from 8000 Plus!

So, problem solved. You are absolutely right. Although no one would have known it VIDI had not been such a real-to-life digitiser. (Absolutely stunning piece of kit for only £99.95 inclusive!)

**Marcus Sharp**  
**Rombo Productions**

● If you think we're going to print this letter, thus giving you even more outrageous free publicity for your products, you're quite wrong.

## CP/M's group theory

Can you clarify a point arising from your CP/M article 'Group Behaviour' in issue 15?

The first illustration after using the command `SHOW [USERS]` lists the files in each of the four user groups on the disc (numbers 0-3) as 10,6,4 and 13 respectively, giving a total of 33 files. It also gives the number of free directory entries as 28. The caption claims that groups 0-3 contain a total of 28 files. This no doubt is an error resulting from mistaking the 28 free entries for files used. The real point however, is this; the 33 used plus 28 free gives a total of 61. Some of my own discs show various combinations of used and free files, all totalling 61. How does this square with the total of 64 files allowed according to manuals?

**J Coleman**  
**Penkridge, Staffs**

● The example screen shot that we used inadvertently showed a special case which wasn't covered in the article. The full story is this: a disc can contain 64 (for single density) or 256 (for double density) 'directory entries'. Files actually use one directory entry per 16k, so for example the J14CPM3.EMS file at 40k needs 3 directory entries on the disc. So if you have long files on the disc, the number of directory entries used will be more than the number of files on the disc. Using `SHOW [USERS]` on a blank disc will reveal 64 free directory entries as you expect.

## A hash of it

I have encountered problems in trying to implement the "SORTERS" program listed in the September issue.

Firstly, when the program is entered correctly on screen, ie. with the relevant "#" marks, listing the program on the printer produces "E" instead of "#" and when attempting to run the program in BASIC the message "File type error in 50" appears. I cannot find an alternative way of including the "#". The manual indicates the English keyboard variant for "#" to be `[ALT]+3`, but whilst this produces "E" on screen a print-out shows

neither a character nor space for one!

**E A Henderson**  
**Southport**

● Forget the printed output, if the # character is shown on screen as you expect then the listing is OK. For obscure reasons the # sign always prints out as £ on the printer. If you really want to print out true #s you'll need to set the printer to the 'American' character set, which you can do from BASIC with the command `LEPRINT CHR$(27)+"R"+CHR$(0)`.

This won't affect the program's running though. It sounds as if your problem (File type error) is you've made a mistake with the `OPEN "I",1,names` in line 40 - you may be trying to input things from a file declared as an output file.

## Last word on Logo

It's a little galling, after months of learning to use Dr Logo by trial and error, to see 8000 Plus giving away most of the answers to all and sundry, but congratulations and thanks to you and to John Connell for the Dr Logo chart in the centre

pages of your December issue. As far as I can tell, the only items not included are the useful but tricky fill, the mysterious setpen and esoteric REDEFP, .DEF, .PRM, .APV and .FMT! However, a few improvements or corrections are possible, I believe, as follows:

`po` can be used to print out the definition of a procedure as well as the value of a variable

`noformat` removes formatting from any defined procedures in the workspace. Dr. Logo allows long lines in procedures to be divided into indented shorter lines for clarity, and comments (like BASIC REM statements) to be included. For example, a procedure can be written as:

```
to square
:procedure to draw square
repeat 4
|
fd 100 ;100 steps forward
rt 90 ;turn right 90 degs
|
end
```

When the procedure is run Logo treats the indented lines as part of

the preceding line, and ignores the text following each semicolon. It's interesting to type the Logo command `gprop "square".FMT` to see how Logo stores the format. However, type `noformat` and the format is forgotten: the indented lines run together and the ';' comments are deleted from the memory. Fairly pointless, though it saves space!

`se & list`: The chart does not make the distinction clear; try comparing the results of typing `pr [list [This is] "a [short list]]` and `pr (se [This is] "a [short sentence])`; the first retains the square brackets and, according to the command `count`, contains only three items, not five words as in the second case.

`word` The correct format is `(word "a "n "d)` not `word ("a "n "d)`.

`dotc` outputs 1 or 0 not

`TRUE/FALSE`

`ed` can be used to edit variables as well as procedures

`ern` erases variables not procedures

## Doughnut adjust your set

I do not think the 'Topology note' [about colouring a map without any two adjacent countries having the same colour] on page 37 of the December issue says what you intended it to say! The smallest number of colours needed to colour any map on a doughnut-shaped planet was determined last century as you said, but the number is seven and not four as

implied in the note.

That some maps do require seven is easily proved by drawing a suitable arrangement of countries on a doughnut. First draw a honeycomb of hexagons, as in the diagram, and then cut out the strip of seven complete hexagons. Ideally the diagram should be printed on a thin sheet of rubber, but it might be difficult to

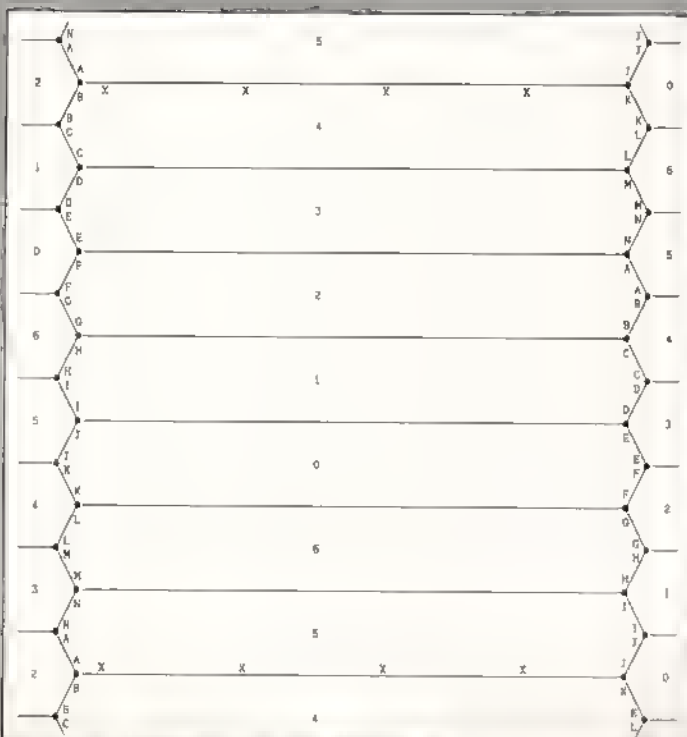
get that through a PCW printer! Now cut out the strip of seven main hexagons and glue the edge marked XXXX to the other edge marked XXXX.

At this point you have a tube with serrated ends. Bending it round and joining the ends will give a doughnut-shaped surface, but before joining give the tube a twist in order that the two edges marked AA can be glued together. All other pairs of edges BB, CC, etc. will also match up and can also be glued (in theory at least). The result is a doughnut-shaped planet with seven hexagonal countries, each of which has a frontier in common with the other six. Thus to ensure that adjacent countries are coloured differently, each country must be a different colour from the others.

Many mathematicians do now believe that four colours suffice for maps drawn on spherical planets, but since the proof involved several hundred hours of computing time on a very powerful machine, it is virtually impossible for the average mathematician in the street to check it - even if she/he owns a PCW!

For the early history of map colouring may I suggest you consult the book *Graph Theory 1736-1936* by NL Biggs, EK Lloyd and RJ Wilson? Better still buy a copy - with two co-authors I only get one-third of the royalties.

Incidentally, the diagram was



change doesn't seem to work, at least in the version of Logo I have.

A final minor complaint: please don't define Logo commands like `.in` and `.out` by reference to obscure BASIC commands; that's rather like translating 'plume de mante' into Chinese, when all we want is the English!

John Clark  
London SE1

● Thank very much for your useful comments. Another little erratum we've spotted is in the `and` and `or` conditional tests: the correct way to test is `(and (x=50) (y=50))` not `((x=50) and (y=50))` as the chart said. Similarly for `or`.

## School of thought

As a teacher I have been very impressed by the 8256/8512 and the ease with which the pupils at school mastered LocoScript. I therefore decided that the 9512 would be the ideal machine for my wife's home based Typing Service



"HIT MISTER - THIS ONE'S ONLY GOT SIX COLOURS ON IT" drawn using LocoScript 2 version 2.12 - the design-your-own characters version.

Dr. EK Lloyd  
Southampton University

● Our mathematician in residence claims that he always knew you need seven colours for doughnut planets, and the apparent mistake in the 'Topology note' you refer to was caused by an editing error. If you think this sounds like bluster, you won't be surprised to learn that Rob Ainsley is the author of 'The Bluffer's Guide to Mathematics' to be published in February. Well, if you can

(now renamed Typing and Word Processing Services!).

A visit to the Amsrad G-MEX Exhibition seemed to bear this out and a 9512 was purchased from Nabitchi at the amazing price of £499 inc VAT. This was eventually (!) delivered and it really is a superb machine.

However, I have one little problem - I wanted to prepare material at home and then print it out on the dot-matrix at school to save on wear and tear on printer and ribbon (and noise!) In reply to Chris Kaley last month you said to simply pop the disc into the B drive of the 8512.

I tried this, and after a few moments discovered that I could no longer make use of the mail-merge. Is there a very simple way round this problem?

SN Garril  
Blackpool

● There is a very simple way, but unfortunately it does involve parting with money. LocoScript on the 9512 comes complete with the spell checker and mail merger, but on the 8000 series machines you have to buy them extra. You'll need to send off to Locomotive (see one of their adverts) for 'LocoMail for LocoScript 2'. It costs £29.95. After this, your mailmerging will work.

## Ageist challenge

Glancing idly through the correspondence columns of another magazine I noted one letter was from a 15-year old and another from a gentleman who proudly informed the readership that he was over 60. I wonder how your readership compares and who are the youngest and oldest practitioners of this black art. Let me put in my own bid with 67 3/4 years.

J Coleman  
Penkridge, Staffs

## Autobooting BASIC

The 'Bank statement' program on p63 of the December issue was exactly what I (World's no. 1 Computer Thicko) had been trying to generate for myself with conspicuous lack of success. It is now up and running at home, but to encourage herself (wife of W's no. 1 CT) to make use of it I would appreciate your help with the following:-

1. How do I put the whole thing - CP/M, BASIC and the bank program on to one autostart disc so that the 8256 can be switched on, the disc inserted, and the first touch of the keyboard be to answer the question 'ACCOUNT NUMBER'?

2. (Only needs to be answered if the first requirement is not

possible) As it is working for me at the moment, the top of the screen fills with the CP/M and BASIC data, with the cursor below. If you then type in 'RUN ACCOUNT' the information starts from the top, superimposed on what is already there. The only way I have found so far to get a clear screen for the statement is to keep punching [RETURN] until all the text has moved up and away. No doubt there is a more sanitary way of doing this but it still seems an unnecessary chore.

3. A third - unrelated - query. You have probably realised that this letter is being typed using a 'SuperType' font. I am very pleased with it, but it most definitely requires proportional spacing. I have lost count of the number of times I have set the printer going, only to notice about half-way through that I was in the default condition, pitch 12. Is it possible to make the default PS?

DB Minterne  
Dorchester, Dorset

● To make an autostart disc you will need to take a fresh formatted disc and copy on to it the files J14CPM3.EMS, BASIC.COM, SUBMIT.COM and your bank account program. If you don't know how to use PIP.COM just copy the files using LocoScript. Let's say you call it the accounts program ACCOUNTS.BAS. Then create an ASCII file called PROFILE.SUB on that disc containing just the line BASIC ACCOUNTS (use the PCW's RPED editor or LocoScript and its 'Make ASCII file' option). The disc will now autostart.

Point 2: you must have mistyped line 10 of the program since it should clear the screen automatically.

Point 3: if you edit your TEMPLATE.STD file to make Pitch PS its standard then that will always carry through to any other files created in the same group.

## Continuous printing

I use Supercalc 2 to calculate and print out 60 piece-work wage sheets.

PROFILE.SUB PIPs everything on to M to increase the speed of the Execute file which automatically loads and prints each successive sheet.

However, as only two variables are entered most of the time is spent watching the printer whilst waiting for the next sheet to be loaded.

Is it possible to store all the completed worksheets and then print them continuously without returning to the keyboard?

A Yaffy  
Glasgow

● It isn't possible in SuperCalc as it stands, but there are programs called 'spoolers' which will do this kind of thing.

Essentially they reserve a portion of the M drive as a large print buffer. There are public domain spooler programs which are obtainable from the various PD software agencies listed on our Public Domain page. Alternatively, MML Systems (01-247 0691) sell a commercial one.



"DON'T KNOW WHAT WE DID BEFORE WE GOT OUR PCW'S..."

## Shop locally

We here in NZ look forward to 8000 Plus's arrival in the bookshops every month. Unfortunately, it takes many months to arrive - August's issue arrived last week.

Now for the crunch! How about putting a part in the rear pages that contains all the addresses of those whom you mention as giving certain services, but give only the telephone number in the main body of your mag. Of course we could ring them up, but it costs a mint! Our mail takes about a week to reach the UK and generally we can get the goods or reply back within three weeks of sending from here. That's a better service than some of our locals. Your suppliers can be congratulated on their service. With a credit card, it's most helpful and there is no messing about with bank drafts etc. and all those extra costs. Thank you.

In your August issue, on page seven, there was a small article 'Shaking the Family Tree' detailing that Kintech had made arrangements with the Mormon church to put their Personal Ancestral File, the CP/M version on to the PCW. The PAF is one of the leading Genealogical Database files, and I have a copy on 5 1/4" discs for the Kaypro, but have been unable to get anyone to install it on 3" discs for me. Besides, it's in CP/M 2.2. That poses another question. Is there any program that allows or can convert CP/M 2.2 to

run on the PCW's CPM Plus (CP/M 3)?

**J V MacLariene**  
Wanganui, New Zealand

● You can usually find out the address of any company mentioned in the magazine by looking at the advertisements - the advertiser index is on the last page each month. We'd rather spend the space printing more reviews and articles!

Copying 5 1/4" discs to 3 1/2" discs is not always cheap. In England, Grey Matter (4 Prigg Meadow, Ashburton, Devon TQ13 7DF) will do it at about £10 a disc, but then you've got to trust your discs to the Transglobal post services.

As for running old software (like some PD software) written for CP/M 2.2, Advantage sell a disc called "Compleat Utilities" which among other things claims to allow CP/M 2.2 program to run under CP/M 3 (the version bundled with the PCW). We haven't tested it, but it's cheap and worth a look.

## Communications problems

I have recently purchased a Psion Organiser which claims that it can be connected to a computer, and that cross-communication is possible. I am sure that this is the case since there is a fifty-nine quid thingy which is available.

Would you mind telling me if it is possible to connect the Psion (lovely name for mispronunciation by the way) to my PCW8256, and if so how, and at what cost. Would you couch your advice at Inexpert Level 1 please (eg. "there is a hole with prongs at the back... etc.") Just what is an RS232 Port and have I got one - should I lay it down, or drink it now?)

Secondly, do I really have to pay £225 for a Sage communications outfit before I can write directly to my mate in Boston - surely there is a cheaper way? Other machines including other Amstrads seem to be able to do it for much less.

**A.H. Piercy**  
Ramsgate

● Well, there is a hole with prongs at the back of the PCW. This is the 'expansion slot' and is where you plug extra hardware into the PCW. One such piece of hardware is a box called an 'RS232 Serial/Parallel Interface' (the obscure name is the result of some international standards committee's deliberations). This box costs about £60 for a PCW.

Once you have got this box on your PCW you can transfer text files to and from your Psion, as long as your Psion has an RS232 interface and the correct lead (I presume this is what the fifty-nine quid buys you). The exact way you do this depends on your Psion, but you may find

## More print wheels

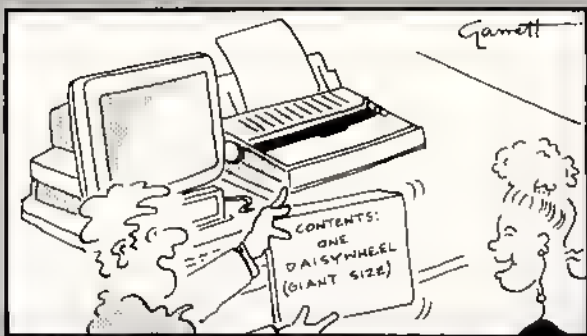
I am the proud, if somewhat computer illiterate, owner of a new Amstrad PCW 9512. I have, however, managed to muddle through the manual and it is now capable of doing everything that I wish it to. (Except cook the dinner!)

I am, however, a bit unsure as to how I go about obtaining print wheels in French and Cyrillic for the standard PCW9512 Printer. I also need to know if I would need any other software to make them work. The other question is, once I have got hold of the appropriate print wheels is it possible to

obtain something to put over the keyboard to indicate which keys to use for the relevant characters?

**Margaret Hutter**  
London W12

● Printing in French is easy, you have to order a 'Swiss French' print wheel from any Amstrad dealer. LocoScript 2 as shipped on the PCW is set up to expect this wheel as an option, so it'll work well with the software. I don't know of any Cyrillic print wheels for the 9512, so you're a bit stuck there. Anyway, you'd need a pretty big daisywheel to cope with all the different characters.



"IT'S THE NEW CHINESE FONT - 2000 CHARACTERS"

our article in issue 13 helpful, where we covered transferring files from a Cambridge Computer Z88 portable to a PCW, using an RS232 serial link.

To talk to your friend in Boston, you will need two more things: most importantly a 'modem', which is a device that converts the signals which come out of the RS232 interface into a form suitable for sending down telephone lines. Modems start at around £100. You will also need some software to run on the PCW to control your modem - the best value at the moment is Mini Office Professional (£29.95 from Database Software) which has a good communications section.

All told, this lot sets you back getting on for £200, so you can save a little on your £225 by shopping around. Some computers do have built-in modems, but then that's why the basic PCW is hundreds of pounds cheaper.

## Mother of invention

To my discredit I am neither a teetotaler nor much of a Christian, but I find that I agree with everything said by the Rev. RW Clements. I also find that your comment after his letter typical of your attitude and does you no credit. I am writing about you people, and in accordance with the idea of choosing title titles that hint at the nature of the subject I have called this one SMARTASS.BOR.

Having suffered the puerile style

of many articles from your editorial staff, I received a mental image of you gathering in one of those mean places to which British pubs have degenerated, listening to mindless music and drinking the goat piss sold there. When the first badly-written article on Protext appeared you confirmed my suspicions with your tenuous suggestion that a can of lager is required.

You could find a reference to canned lager in the publications of the Campaign For Real Ale. It is the example of what is the very worst. I have there read the view that such a beverage is for maiden aunts, retired colonels and other weaklings.

There is a well-known Freudian explanation of your bombast. People unsure of themselves often claim qualities they lack. You like to print remarks from readers praising you. I expect you write a few of them yourself. Many will be genuine but they will come from people who think that canned lager is good to drink or that Thatcher cares for the British people.

I bought a piece of hardware with software because you had recommended it highly. I received no help from the manufacturers when I told them that the manual was incomprehensible to the point of rendering the thing useless. You

did not accept responsibility for your recommendation as you ignored my letter asking for advice. You did not even publish any of it with your usual glib and unhelpful note.

The thing that prompted me to write was your irresponsible idiotic comment on the Rev Clements's letter which was well-meaning and, as an admonition, lair. I know that you will not be in any way influenced: I doubt you take any real notice of the replies to your recent questionnaire which was likely to have been just window dressing.

**SH Scott, Ph.D.**  
Watford

● Well, how many people think we made this letter up?

We try to angle the content and style of the magazine at as wide a range of people as possible, and I'm sorry it hasn't pleased you. You may be interested to know that we've only ever invented one letter in the PostScript pages, and that was a complaint!

We can't be expected to help every single reader personally with difficulties in products they have bought from somebody else. We could start a technical help service, but it would be a full-time job for somebody and we'd have to charge something like £10 an hour for it.

## The last word

I know you said that correspondence on Digital Research's CBASIC compiler was closed, but perhaps you will permit me to make a comment on Nicholas Graham's letter in the January issue. His problem is probably due to the fact that he is using floating point instead of integer variables in his program. The speed difference is quite amazing. I copied your test program from page 44 of the same issue and compiled it using DR CBASIC and then edited it to remove the % signs which deline the variables to be integers.

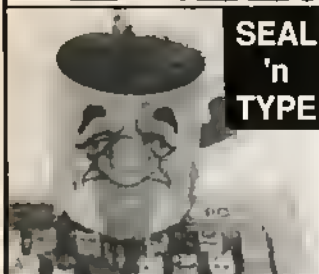
The first program, using integer arithmetic, ran in less than 12 seconds. The second took over 15 minutes (I can't give an exact time as I wandered off to do something else after about 15 minutes and came back to find it had finished).

The moral is, as Mr. Hall of Locomotive Software said in the December issue, use defined integers wherever possible. I have used CBASIC to compile several old games programs. After solving the minor translation problems I now get an instant response in, for example, Othello, instead of practising my thumb-twiddling.

**Digby L. James**  
Mitcham, Surrey.



# CHEER UP! we've got you covered



## SEAL 'n TYPE

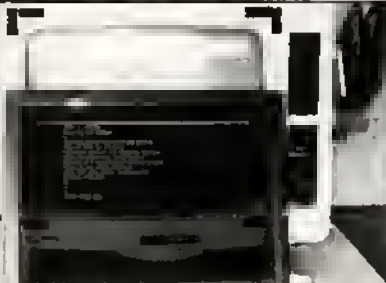
- \* Protective keyboard cover through which you can type freely & easily.
- \* 24-hour dust/spill cover.
- \* Removable, washable, re-usable.
- \* Can be custom made for any keyboard. Ring for details

£10.15

Patent & registered design pending

## SCREEN 'N' VIEW £14.50

- \* Superior anti-glare VDU filter.
- \* Ultra-fine framed mesh.
- \* Velcro fittings.
- \* Available for mono or colour



## PLONKER BOX £4.99

- \* Working disc holder.
- \* Plunk your discs out of harm's way
- \* Holds all standard sizes of discs.

## SWITCH 'n' BOX: KIT FOR PCW USERS £29.95

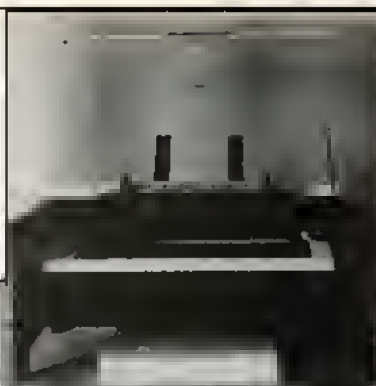
(includes cables)

- \* Data switchbox, provides easy switching of data from PCW to 2 outlets: Printer/ Micros/Modems
- \* Box only: £26.95 Cables £5.75



## KADOR MOUSE PAD £5.95

- \* Prolongs life of your mouse & protects work surface.
- \* Generous size (34x29cm).
- \* Anti-friction, anti-static.



## PEACE 'n QUIET £39.95

- \* PCW Acoustic printer stand.
- \* Noise reduced to below EEC recommended noise level.
- \* Paper slots for single & continuous stationery.

## FEED 'n PRINT £7.50

- \* Adjustable PCW paper guide.
- \* Ensures straight paper feeding every time.
- \* Sliding markers & pitch scale.
- \* Easy clip on.

## DEXETTE COPY HOLDER

A4 £6.00 A5 £7.50

- \* Multi-purpose copy holder/clipboard/write-wipe memo board.
- \* Free standing with removable clips.
- \* Moving cursor + centimetre grid

## DISC HOLDER £5.50

- \* Holds 10 x 3" CF2 Discs.
- \* Pop up mechanism
- \* Holder + 10 discs for £28.95



## TILT 'n TYPE Keyboard feet for PCW 8256/8512 £3.45

- \* Provides a professional operating tilt.
- \* Adds comfort, increases typing speeds.
- \* Easy to fit using existing hold.



## TRY OUR RE-INKING SERVICE:

- \* For all types of fabric ribbons.
- \* Same day service. \* FREE transporter S.A.E.
- Ring 0685 870571/883663 ext 217

£1.90

Imstrad + Epson

## SEND OR RING FOR OUR CATALOGUE

Free Re-Ink with orders over £5.00

Cheques/P.O. payable to KADOR, Unit 18, Aberaman Ind Est.

Prices are fully inclusive

Aberdare, Mid Glam. CF44 6DA



## ££ LOOK & SAVE ££

Micro Simplex Accounts ...	90.95	Fleet Street Editor Plus ....	39.95
Sage Popular Accounts ....	74.95	Protext .....	46.95
Sage Popular Accounts+. .	104.95	Pocket Protext .....	32.95
Locomail 2 .....	27.95	LocoMail .....	30.95
Locspell 2 .....	18.95	LocoSpell .....	30.95
Signwriter .....	37.95	LocoScript 2 .....	19.95
Money Manager .....	21.95	Scratchpad Plus .....	44.95
Money Manager Plus .....	29.95	Cracker 2 .....	38.95
Sage Payroll .....	60.95	Supercalc 2 .....	38.95
Easy Labeller .....	24.95	Masterscan + Paint .....	71.95
Sage Chit Chat Combo ....	78.95	Desktop Publisher .....	22.95
dBase II .....	79.95	Desktop Pub. + Mouse ....	66.95
Delta 1.25 .....	81.95	Head Over Heels .....	12.95
Cambase .....	48.95	Cyrus 2 Chess .....	13.95
Masterfile 8000 .....	37.95	Tornahawk .....	17.95
Database Mngr AtLast .....	21.95	Bridge Player 2000 .....	17.95

## ★★ SPECIAL ★★

### MINI OFFICE PROFF £21.00

PERSONAL ANCESTRAL FILE The ultimate in Genealogy Software ..... 59.00

PCW9512 DOUBLE DRIVE £688.00

PLUS MANY MORE, PLEASE PHONE

ALL PRICES INCLUDE VAT, 1st CLASS P&P  
FREE ADVICE AND USER SUPPORT

— WE CARE —

TELEPHONE 0208 850176

Cheques/PO to: **KINTECH COMPUTERS**  
**St Tudy Bodmin Cornwall PL30 3NH**

## ADVERTISER'S INDEX

ARC .....	76	Hi Voltage .....	60
ASD Engineering .....	67	KCS .....	12
Advanced Memory Systems ..	OBC	KDS .....	58
Advantage .....	58	Kador Enterprises .....	90
Aeon .....	45	Kintech Computers .....	90
Aladdin .....	68	Locomotive Systems .....	9
Alfa Electronics .....	53	McGregor .....	68
Amsoft .....	45	Manx Tapes .....	48
Amstax .....	79	Margin Maker .....	53
Ansible .....	48	MASS .....	65
BBD Dust Covers .....	30	Meac .....	41
British Telecom .....	76	Mercury .....	79
CP Software .....	17	Meridian .....	65
CS Software .....	68	Midas .....	72
Campbell Systems .....	IFC	Minerva .....	67
Caspell .....	72	Mira Group .....	79
Cavalier .....	42	Nabitchi Computers .....	23
Classified Ads .....	89	Newstar Software .....	24
Coda .....	45	Office International .....	53
Coleman S.C. ....	58	P & H Electronics .....	59
Compumart .....	IBC	Prospec .....	72
Comsoft .....	73	RSC .....	34-35
Comtec .....	68	Rational Solutions .....	50
Connect Systems .....	48	Reeltime .....	30
Copy Comm .....	30	Richman Software .....	15
Cwmbran Comp. Centre .....	60	Roberts Franklin .....	56
DGA .....	56	Rugby Micro Spares .....	46
Database .....	4	SBS Comp. Supplies .....	40,41
Digital International .....	38	Sage .....	21
Dragonfly .....	79	Selec .....	76
Electric Studio .....	6	Silicon City .....	60
Goode Software .....	41	Swallow Soft .....	79
HSV .....	56	Timson T.J. ....	68
Hardsoft .....	72	Trinity .....	72
Headline .....	30	West of Britain Bus. Svs ..	79
Hisoft .....	84	Worldwide .....	76

# NEW LOWER PRICES AND... EVEN BETTER SERVICE!

Now ALL Goods Despatched SAME DAY by 1<sup>st</sup> CLASS POST-FREE!

## PRINTER RIBBONS

Genuine AMSTRAD Printer Ribbons...  
Better Quality-Lower Price!

- NEW PCW CARBON ..... £5.95
- STANDARD PCW ..... £4.95
- DMP 2000/3000 ..... £4.95

All Ribbons-POST FREE!  
Please Specify Printer when Ordering

## PAPER

- High Quality 11"x 9 1/4"
- 60gsm Weight
- Micro-Perf all Round
- 2000 Sheets -

**ONLY**  
**£14.95**  
Post Free!

## PCW SOFTWARE SPECIALS

- LOCOMAIL (Amsoft) ..... £34
- THE MAIL MERGE PROGRAM..... £34
- LOCOSPELL (Amsoft) ..... £34
- THE SPELLING CHECKER..... £34
- NEWSDESK INTERNATIONAL  
(The Electric Studio) ..... £44
- THE DESKTOP PUBLISHING SYSTEM..... £44
- SUPERCALC 2 (Amsoft) ..... £44
- THE SPREADSHEET..... £44
- MASTERFILE 8000 (Campbell Systems) ..... £44
- THE DATABASE..... £44

FREE! Blank Disk with each of the above  
Software Specials

## PCW STARTER PAK

- 10 CF2 Disks 'Special Pak Price'
- 1 AMS 20L Box
- 2000 Sheets of Paper
- 1 PCW Carbon Ribbon

**£49.95**

SAVE ALMOST £9! Post Free!

## NEW IN STOCK

High Quality PVC  
Dust Cover Set (for PCW) **£9.95**

## How to Order...



• Simply list your order, name and full address with a cheque or postal order (made payable to Compumart) and post to our address opposite or:



• Phone any of our 3 order lines (24 hours) and order using your credit card. Please give your full name and address, daytime phone number, details of your order and the name of the magazine you are ordering from.



• All goods are usually despatched same day - 1st class post - FREE OF CHARGE!



• For SPEEDY GUARANTEED NEXT DAY DELIVERY by SECURICOR, please add JUST £5 to goods total



• We welcome official written purchase orders from plc's, government and educational establishments etc. Goods will be despatched on receipt of order, 28 day invoice will follow.



• Overseas orders: please deduct VAT (15%) then add 25% for air mail and insurance. (All payments in £ sterling)

• All prices include VAT. Prices and delivery subject to availability. All goods fully guaranteed.

## 3" DISKS



New Low Price!

5 Pack **ONLY £11.95**

10 Pack **ONLY £22.99**

Post Free!

Genuine AMSOFT CF2 3" Microdisks from the U.K.'s largest supplier.

(CF2 Disks are for CPC & PCW Machines).

- CERTIFIED 100% ERROR FREE
- LIFETIME GUARANTEE
- INDIVIDUALLY CASED
- USE IN 1st and 2nd DRIVE (on PCW)

Excellent Value ONLY from Compumart  
Phone for Quantity Discounts.

## DISK STORAGE



**ONLY**  
**£12.95**  
Post Free!

The superb AMS 20L Disk Storage Box.  
Save your Valuable Disks from spilt drinks, dust etc.

- HOLDS 21-3" DISKS (Cased)
- HIGHEST QUALITY PERSPEX
- HINGED, LOCKABLE LID (with 2 keys)
- PRECISION MOULDED - No Disk Rattle

Excellent Value ONLY from Compumart

# Compumart

**A GREAT DEAL MORE-FOR A GOOD DEAL LESS!**

**COMPUMART-Dept80+ · Jubillie Drive**  
**Loughborough · Leics · LE11 0X5**  
**☎ 0509 610444 (5 lines)**

IT'S SURPRISING THE TYPE OF PEOPLE  
MAKING THE HEADLINES THESE DAYS.



### STOP PRESS

'Stop Press' puts you right at the heart of the Desktop Publishing Revolution. Utilising dynamic WYSIWYG (What You See Is What You Get) facilities, 'Stop Press' makes it simple to create professional newsletters, leaflets, flyers, forms or in fact anything where text and graphics are required.

'Stop Press' is the ideal publishing software solution for home enthusiasts, schools, societies and small businesses.

### READ ALL ABOUT IT

Documents may be prepared using any of the superb selection of typefaces (12 or more) supplied or alternatively a typeface of your own design.

Text can be entered from within 'Stop Press' or imported from your preferred word processor with fully automatic on-screen text formatting as the file loads.

Centering, ragged right, and literal justification are all available. There also is full pixel resolution control over character size and spacing.

### GRAPHIC DESIGN

As well as the ability to import digitised images there are outstanding facilities for drawing, spraying and painting using either the patterns supplied or your own pattern designs, enabling you to produce graphs, charts, diagrams and pictures.

These can then be pasted, cropped or re-sized to fit any layout, and for those finishing touches a fantastic zoom is available.

### HOT OFF THE PRESSES

At anytime your pages can be previewed before being output to a wide range of Epson or compatible dot matrix printers.

### AMX MOUSE

'Stop Press' can be used with a joystick or keyboard but the AMX MK III Mouse gives you the control and flexibility which you would expect from the most accurate pointing device available. Produced in Switzerland the AMX Mouse has a unique patented design which includes high resolution movement (D.P.I.) and superior ball technology to ensure that contact between the Mouse and surface is constant at all times.



### EXTRA! EXTRA!

Complimenting 'Stop Press', Extra! Extra! is a superb collection of ready made clip art and new typefaces covering a wide variety of subjects and styles.

'STOP PRESS' IS AVAILABLE FOR	SOFTWARE ONLY	WITH AMX MK. III MOUSE	EXTRA! EXTRA!
ACORN BBC/B+ /MASTER	£49.99	£79.99	£24.99
AMSTRAD PCW 8256/8512	£49.99	£69.99	—
AMSTRAD CPC 6128	£49.99	£79.99	£24.99
COMMODORE 64/128	£39.99	£69.99	—

These superb products are available from all good computer dealers or direct by cheque, Access or Visa. All prices include VAT, postage and packing. Become your own publishing baron with 'Stop Press' and start the presses rolling.

# AMS

ADVANCED MEMORY SYSTEMS LIMITED

Imagination at your fingertips

FOR INSTANT ACCESS OR VISA ORDERS TELEPHONE: (0925) 413501.

ADVANCED MEMORY SYSTEMS LIMITED 166-170 WILDERSPOOL CAUSEWAY, WARRINGTON WA4 6OA.

TELEPHONE: (0925) 413501 TELEX 628672 AMS G FAX: 0925 58039

TUBELINK ON MICRONEI 800 TUBELINK \* SUPPORTS THE AMX MOUSE AND ALL AMS SOFTWARE

